

DISCOVERY PEAK CHARTER SCHOOL INITIATIVE UNIT DEVELOPMENT

By

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### Abstract

I have created two units of study that focus around place-based education, project based learning and emphasize physical activity. These units were created with the purpose of being used at Discovery Peak Charter School. Guided by underlying principles of *Understanding by Design* (2011) and *Place-based Curriculum Design* (2015), each unit aligns with the mission of the school and have been balanced to create a holistic quarter long unit of study. The units are built around three main principles; place-based education, project based learning, and physical activity. Each of these principles will be woven into the unit, but may not be present in each lesson section.

## Discovery Peak Charter School Initiate Unit Development

### **Focus**

The purpose of this project is to create a curriculum for the Discovery Peak Charter School Initiative in North Pole, Alaska. I created units built around three main principles; place-based-education, project-based learning, and physical activity. Each of these principles are woven into the unit; however, all of the principles may not be present in each lesson section. Place-based education's focus on children learning in their environment and community, rather than just about it. Project-based learning provides opportunities for individualized, hands-on, thematic learning. The focus on physical activity is simply to get students up out of their seats and allow them to move while learning and learn through movement; it is not a focus on physical education. Later I will define these goals in more detail.

These units are created as afternoon explorations for Discovery Peak Charter School. To understand the content purpose of the units you will need to have a basic understanding of the proposed school day structure. The mornings are dedicated to meeting core standards in the areas of mathematics and language arts. The afternoon portion of the day are dedicated to project-based, place-based explorations with a focus on physical activity. The afternoon is when these units are taught; after a more traditional, specialized delivery of basic concepts in the morning. The units are primarily based around Social Studies standards, however language, math, and science standards are woven throughout. In other words, the units are interdisciplinary. In order to promote some of Discovery Peak's goals, there units were created as enrichment activities.

Schools of choice are in need in the North Pole area, as there are no school options for K-6 students besides the local neighborhood schools defined by North Star Borough School District

boundaries. Discovery Peak focuses on three main areas when creating curriculum and school culture: place-based explorations, project-based learning, and physical activity. Children will be provided time to move, learn at their own pace and grasp important concepts, as well as create a sense of purpose in their community. This will create a positive learning environment and community within the school, and a connection to the community as a positive place.

### **Rationale**

#### **Need**

The need for Discovery Peak Charter School has become more apparent within the community, as well as at the district level. There are many changes coming for North Pole schools, and the creation of an extra school could alleviate some of that stress for families and teachers, as well as the school district. These units I have created will provide evidence for a portion of the application process in order for the school to move forward.

Fairbanks North Star Borough School District proposes all schools provide a Kindergarten through eighth grade option to families. With the current facilities, it is physically impossible to add classrooms to North Pole K-5 schools because of overcrowding. Schools are forced to look at options such as having one 6th, 7th, & 8th combination class within the elementary schools, which raises concerns for preparing those students for transitioning into high school from an elementary school.

While Fairbanks has several schools of choice at the elementary level, North Pole has none. Thus, we need to provide equal opportunities and additional educational options for students in the North Pole area. Discovery Peak will be located in North Pole. This area has a high poverty rate ([www.city-data.com](http://www.city-data.com), April 14, 2017); as evidenced by our students who qualify for free and reduced meals. Drug related crimes are above the national average



([www.city-data.com](http://www.city-data.com), April 14, 2017). Providing options of community building for students who live in this area could create some positive change.

### **Why Place-based Education, Physical Activity, and Project-Based Learning?**

Kids need to move! There is extensive research showing that kids learn better when they are active. Kall, Nilsson, and Linden (2014) demonstrated that physical activity, even when it is introduced simply for enjoyment, can boost children's test scores and improve their learning (p. 474). Resaland et al. (2016) agreed that this is especially helpful in low achieving students. Kids learn better when they have a purpose for their learning, which is what place-based community involved explorations will provide. Smith (2013) reinforced these ideals, "When place is incorporated into the act of curriculum development, children's everyday experiences become one of the foundations upon which learning is constructed. When teachers do this, students more easily understand why they are learning what is being taught" (p. 213). Smith (2013) provided several cases of successful place-based education initiatives facilitated by teachers and based on student interests.

Kids learn at different paces. Any teacher will tell you that you cannot teach a concept to all students in the allotted amount of time from a canned curriculum guide. The curriculum for Discovery Peak Charter School is designed to support students who struggle in a traditional school environment to grow and learn at their own pace, while being provided time for physical movement. The exploratory units connect students with their community to make their learning meaningful and instill a sense of pride in their work. The units I have created embody these concepts. These exploratory units allow for physical movement, place-based learning, and project-based learning in a multi-age setting.

### Personal Significance

There are many stories attached to each of the three areas emphasized by Discovery Peak Charter School (individualized learning, physical activity, place-based explorations, and project-based learning), which cause me to believe they are imperative to good education practices. The following was my very first “Aha!” moment when exploring the importance of physical activity as well as personalized learning.

It was my first (and only) year of teaching kindergarten. I had a little boy in my class who had extreme amounts of energy and an inability to focus on an assigned task. I had exhausted my bag of tricks trying to get him to focus on flashcards to memorize letter names. We tried preferred seating, technology, partner work, one-on-one with adult volunteers in a quiet space, and a gamut of other ideas. I was in the process of a special education referral when I found one more thing to try. I directed my aide supervise the activity in the classroom while I worked the little boy in the hallway. I walked backwards while flipping flashcards while he followed me, and he could name every letter, *and its sound!* He was proud and confident and had a feeling of accomplishment that he hadn’t had since the last time he made his arch nemesis in the class cry three times in one day. Later that day we tried the flashcards again in the room and nothing. So we did it while walking again, and like magic, the knowledge was there again. From my experience, I concluded that this kid’s brain was directly connected to his feet. So we went from there and by incorporating movement into his learning he was able to read by the time he left my classroom.

The student described above needed physical activity in order to show his success in learning. He also needed to learn at his own pace; he started out slowly, but surpassed his peers when given the tools he needed to learn. These are the kids for whom Discovery Peak Charter

School needs to exist. I am in no way faulting traditional education and the amazing teachers I have worked with through the years. But one size does not fit all, and we cannot create positive learning environments for all students in the same way.

As far as place-based explorations go, creating constructive citizens starts young. If we can get students involved in the community, they will be more likely to help where there is need and take pride in the community and natural environment where they reside. Sobel (1996) makes a strong argument that, “projects that serve the community show students the relevance of the curriculum and give community organizations an infection of youthful energy” (p.40). That youthful energy can create some serious positive change while empowering youth to understand they can be agents of change.

### **Literature Review**

The literature reviewed for this project includes articles or books that focus on each of Discovery Peak’s three goals. I wanted to present research to support why I have chosen these focuses for the curriculum. I believe it is clear that there is research to support place-based explorations, physical activity, as well as the importance of project-based learning. The concept of individualized learning blends into these two styles of learning as project-based learning lends well to all students of varying abilities.

### **Place-Based Education**

Place-based education is a guiding element in the development of the units created. Its importance and effectiveness has been well researched and recorded. Improved graduation rates and attendance, are a couple of the many benefits of place-based education. Smith (2013) cited many cases where students’ graduation rates and college attendance has significantly improved through the introduction of place-based education into the classroom (p. 214-215). Farmer,

Knapp, and Benton (2007) studied a class of 30 urban, Tennessee, fourth graders and how a one-day field trip to Great Smoky Mountains National Park shaped their environmental awareness. They found through interviews after one year students were able to describe their trip in vivid detail, as well as recall content knowledge learned from their excursion. The authors went on to explain about the second faction of place-based education that is well represented in research: citizenship. Farmer et al. (2007) summarized their study mentioned above with, “The findings of this study suggest that several student participants retained long-term environmental and ecological content and evidenced a potentially perceived increase in proenvironmental attitude.” (p. 40). I found this article particularly key to supporting the importance of community outreach and the implementation of field trips into the units. Although the units I created touch on environmental awareness, it is not the main focus. However, nurturing pro-environmental attitudes in children will be a focus of the place-based emphasis at Discovery Peak Charter School.

Most of the research I muddled through about place-based education centered around how students who are educated with place-based methods develop a stronger sense of citizenship and connection to place. In Sobel’s (2013) book *Place-Based Education; Connecting Classrooms and Communities* the seventh chapter “Building a Three-legged Stool of Academic Achievement, Social Capital, and Environmental Quality” spoke to the idea that place-based education builds strong, successful citizens. Here Sobel (2013) explained how place-based education is really the backbone of creating constructive citizens who want to preserve their environment and make the place they reside a better one. Sobel’s work inspired the community service aspects of both of the units created. Having students interact with their community inspires a positive outlook and a sense of caring and connectedness.

Part of being a good citizen is understanding one's rights and responsibilities. Anderson and Gurnee (2016) discussed how place-based education is a great way to create good citizens in their article *Home-Grown Citizens*. They discuss at length that placing students within their community to learn will foster children's sense of responsibility for their community as well as their environment. They argued that place-based education is an excellent way to teach about rights and what responsibilities are required to have these rights (p. 74). This article was what inspired me to create the *Community* unit of this project. It brought a focus to how to become a responsible citizen and work well with others in your community.

While creating the *Community* unit mentioned above, I kept Westheimer and Kahne's (2004) work in my mind. They described three different kinds of citizens it takes to maintain a functional society in their article *What Kind of Citizen? The Politics of Educating for Democracy*. They outlined that educators usually educate for one of the following principals: personally responsible, participatory, and justice-oriented citizens; however, they are all necessary to cultivate a successful society (p. 240). The authors also described the weaknesses of solely personally responsible citizens; while personally responsible citizens have positive traits within a community, they are not democratically responsible citizens. The *Community* unit is based strongly in acts of kindness and being a personally responsible citizen. I chose this route because of the age group that is being taught. Becoming a personally responsible citizen is the first step in becoming a well-rounded citizen. Much of what is presented by Westheimer and Kahne (2004) does not apply to the age group of this unit, but it helps maintain focus on teaching the how and why of good citizenship.

In summary, the research explained students care more about their place and environment when they get to have hands-on experiences, and learn in it, and not just about it. There is

warning given that community service does not necessarily make for good citizens, but it makes for good community members. In my opinion, the elementary level is a great place to begin teaching personal responsibility before taking the step into civic action. However, I hear the warning and recognize the next step for students to take.

Project-based learning can be done in any setting with any set of goals, while the main goal of place-based learning is to connect children to their environment and community. Although place-based learning is project-based learning, the literature behind project-based learning describes how children's academic needs are met at a more in depth level. Therefore, it is important to take a more in depth look at project-based learning and how it services students of all ability levels.

### **Project-Based Learning**

Much of the project-based learning research I found centers around gifted learners and meeting their needs. However, it is widely supported that project-based learning supports and fosters learners of all ability levels. Diffily (2002) explained that project-based learning is fantastic for differentiation, allows for students to use their higher level thinking skills, and provides an opportunity for students to learn how to find useful information rather than simply ask for answers. This aligns with Discovery Peak's desire to individualize learning for all children and teach each child on their level. Hertzog (2005) also supported the idea that project-based learning supports all learners when she found project-based learning raised the achievement scores of the majority of the students and allowed the gifted students to perform at their level without requiring them to do different assignments than the rest of the class. These two articles provided the evidence I needed to feel comfortable creating leveled learning for many of the lessons within the units.

Bland, Coxon, Chandler, and VanTassel-Baska (2010) continued to strengthen the idea that project-based learning is an excellent delivery system for all learning when they discussed concepts such as scaffolding project-based curriculum to help stimulate higher-level thinkers while still meeting the needs of other students. Bland et. al. (2010) created an excellent summary of the study by stating:

Project Clarion represents an important step forward for the field of gifted education in crafting systematic science interventions that provide multiple opportunities for young disadvantaged learners to practice scientific habits of mind yet also serve the gifted learner effectively in the areas of concept development, content attainment, and scientific investigation and reason skills. (p. 55)

Hung, Hwang, & Huang (2012) experimented with a perfect example of project-based learning with a place-based emphasis, and they even integrated technology. Student driven projects focused on, “How to save energy” and “Energy Saving Actions” (p. 372). With these ideas students can create change in their environment or community while getting real life hands-on experiences. After interviewing participating students, the researchers found that, “project based learning can engage learners in cooperating with their group members and help them improve their learning achievement” (p. 376). In the units, there is an ample amount of group work. Students are expected to work with each other as a team doing different tasks while trying to create one product. These studies again show how project-based learning inspires community action. Such action is a goal of curriculum development for Discovery Peak Charter School. However, again the units presented in this project focus mainly on personal citizenship and community service, which are small steps towards action.

The last two resources I found speak more to what is expected of teachers to make project based learning work. In the chapter, *What Really Matters in Planning For Student Success*, Tomlinson and McTighe (2006) outlined how attitudes and skills of responsive teachers matter. They outlined nine attitudes and skills compelling teachers possess. These include; 1) “establish clarity about curricular essentials” 2) “accept responsibility for learner success” 3) “develop communities of respect” 4) “build awareness of what works for each other” 5) “develop classroom management routines that contribute to success” 6) “help students become effective partners in their own success” 7) “develop flexible classroom teaching routines” 8) “expand a repertoire of instructional strategies” and 9) “reflect on individual progress with an eye toward individual goals and personal success” (p. 40). I wanted to include this as a reference to show that regardless of how structurally sound lessons are, it takes a skilled, well informed educator to deliver the lessons successfully.

Finally, Hoffman (2002) spoke of grouping strategies utilized by teachers in multi-age settings. She explained, whole class meetings, teacher-led small groups, student-led small groups, dyads and individual work are all important ways to deliver lessons within a group of students performing at different levels. Each of these styles is utilized within the units to ensure students are getting their personal educational needs met. Another piece of her article on flexible grouping that I found inspirational was when she stated, “because they work side by side with classmates whose rates of development vary cognitively and socially, they seem to appreciate one another for their various strengths,” (p. 49). This completely encompasses my enjoyment of having different ability and age levels in one classroom. I love the comradery that is developed between the differing age groups of kids. In the units of this project, everyone has a chance to be an expert and teach each other.



My findings about project-based learning really emphasized the ability to provide leveled learning to students. This literature showed the importance of giving students differing activities based on their skills and ability levels. This way all students can be learning about one topic while getting their varied academic levels met. Multi-age classrooms can have their struggles, however providing students with project-based learning opportunities can help meet their individual needs.

While elements of physical activity can be found in both place-based learning and project-based learning, the goal of Discovery Peak Charter school encompasses physical activity. The following literature delves deeper into discussing its importance to student learning and explains the difference between physical activity and physical education.

### **Physical Activity**

The importance of physical activity in the classroom has been extensively studied. While there is some conflicting information, the overarching theme is that kids learn better when they move, and if they don't it is not going to hurt them. Resaland et al. (2016) increased the physical activity of a group of students to 300 minutes per week, while the control group stayed at 135 minutes per week (p. 324). They found no significant change in academic performance when presented with increased physical activity. However, they found that lower achieving students were more successful in learning when given the chance to be more active. While this statement is not supported in research, I am assuming that these kids whose grades did not improve had their needs met, while the students who did improve had a deficit filled.

Kall, Nilsson, and Linden (2014) did a similar study over a four-year period (p. 474). This study "showed that a school-based physical activity intervention program designed to make students more physically active during the school day significantly improved the children's

academic achievement” (p. 476). Discovery Peak has lofty goals of filling the gaps for students who struggle with a traditional elementary school day. Including physical activity in daily lessons is one way to address deficits for students.

Caspersen, Powell, & Christenson (1985) discussed the difference between physical activity, exercise, and physical fitness. They defined physical activity as, “any bodily movement produced by skeletal muscles that result in energy expenditure” (p. 126). They defined physical fitness as, “the ability to carry out daily tasks with vigor and alertness, without undue fatigue and with ample energy” (p. 128). While this study is dated, it is important to understand the difference between these terms to show what exactly is going to be expected in the development of lessons. The desire of Discovery Peak is not just to increase the physical fitness of children; rather the goal is to have students move more throughout the school day to help them focus on their learning.

Finally, I want to take a moment to recognize that physical activity is one way to improve poor attendance, not just improve academic achievement. Marzano and Pickering’s (2011) chapter *How Do I Feel*, discussed how incorporating physical movement impacts student energy which affects their ability and or disposition to attend. The authors continued to explain how movement helps children gain energy, promotes understanding of content, and improves student attendance. Kall et al. (2014) also mentioned that increased physical activity can improve attendance rates and students’ desire to be at school.

Marzano and Pickering (2011) also provided a number of helpful sources that provide a variety of ways teachers can integrate physical movement; *Brain Gym: Simple Activities for the Whole Brain Learning*, *Hands On: How to Use Brain Gym in the Classroom*, *Making the Brain/Body Connection: A Playful Guide to Releasing Mental, Physical and Emotional Blocks to*

*Success, and Smart Moves: Why Learning Is Not All in Your Head.* This will be helpful for brain breaks throughout the day when lessons become too much of a seated activity.

Research findings on physical activity show that many students perform better academically when given brain breaks and the ability to move around more than in a traditional classroom. Physical activity can also help improve attendance rates. While not all students benefit from this style of learning, it is not going to hurt the kids who don't need it. While not all students require this style of learning, all students will benefit. Therefore, physical activity is intentionally woven into the units of this project.

### **Statement of Justification**

Anytime someone becomes passionate about making a change, either to help others or themselves, there are personal reasons for doing so. I admit I want this school's curriculum to become a reality because it is something that I would love to teach. It also resonates with me as a student. I picked up on some concepts quickly and would then get bored and become a behavior issue. Also, if I felt the teacher was moving too fast for me and I struggled with a concept, I would get frustrated and misbehave. When given options to move while learning, and to work on projects with meaning and groups I did very well in school. I enjoy being in my environment and participating as a positive community member. I enjoy teaching longer units of study with a theme and remember more from these experiences as a child than I did from simply reading and regurgitating. I want to make things memorable for my students.

I want movement, community-based explorations, and individually paced learning because it would have helped me as a student and I would enjoy being able to share these things with my students. However, I am aware that not all students learn the same and I will have to be

mindful and provide broad expanse of interests and learning levels to ensure all students are getting the education they deserve and need through these units.

### **Methods**

The basis of my unit development is rooted deeply in *Place Based Curriculum Design*. Demarest (2015) claimed “personal connections are the foundation of all learning” (p. 45). Through this belief I have spent time with the units to ensure they are based in students making personal connections to their local area. In the units, some of this will be rooted in the outdoors, but much of it is a focus on community. Demarest (2015) explained that good teachers, “know the many ways that learning requires an emotional connection” (p. 47). The basis of this methodology is to ensure that lessons are based on something that children can connect to on a personal basis. The units developed for this project also emphasized local investigations as an essential element of *Place-Based Curriculum Design* (Demarest, 2015). Specifically, in the *Community* unit students will explore their local grocery store and a near-by lake. As well, in the *Iditarod* unit, students will be attending the restart of the race in their community.

I also drew from the theoretical thinking behind the *Understanding by Design* (UBD) method of curriculum development (Wiggins & McTighe, 2011). It just makes sense to start with what you want kids to know and then think about how to teach it, rather than planning entire lessons and guessing the outcome. While the units developed in this project do not follow the exact UBD format, each unit contains the fundamental elements of UBD. By following the three steps developed by McTighe and Wiggins (2011) of “identifying desired results”, “determining assessment evidence”, and “planning learning experiences and instruction”, the units were developed with an emphasis on backwards design (p. 6).

The specific format of my units was informed by the *Instructional Unit Guide* provided by University of Alaska Fairbanks. The basic design principles of the *Instructional Unit Guide* were used to frame the content of my units and lessons.

I was mindful of *Place-based Curriculum Design* and *Understanding by Design* and their theoretical frameworks while creating the following units. I started with a group of skills I wanted students to learn (based around place), developed a final project/assessment, and then compiled the lessons' components. While using the ideals around UBD and *Place-based Curriculum Design* I focused on developing units that will provide enrichment to students at Discovery Peak. Utilizing these two methods, helped me develop thematic units based on the *Instructional Unit Guide* provided by UAF.

### **Project**

The units I created are attached as Appendix A: *Community* and Appendix B: *Iditarod*. The *Community* unit is designed for kindergarten, first, and second grade students in a multi-age setting. It is a place-based, social studies unit that encompasses project-based learning and includes physical activity. It focuses on helping children understand their place in their community and the different levels of community. The *Iditarod* unit is designed for third, fourth, and fifth grade students in a multi-age setting. It is also a place-based, social studies unit that encompasses project-based learning and includes physical activity. It focuses on providing students with locally relevant materials to explore a sense of place within their community.

### **Reflections**

After the creation of each unit I reflected on the foreseeable issues that could arise. I also created a checklist to ensure the three main focuses; place-based education, project-based learning, and physical activity were present throughout the lessons. I did this to show that I

understand that teaching nontraditional lessons have a certain element of difficulty and can be more work for the teacher. This way teachers who implement these lessons have a strong understanding of what they are getting into and can be better prepared.

There are also some aspects of the creation process I would like to reflect on. The links between place-based education and project-based education are strong. Even physical activity links well with the two. When I started this process, I questioned why we had settled on these three seemingly separate ways to deliver curriculum. However, through the research and development of these units I started to see how all three naturally work well together and even depend on one another.

I found the literature on place-based education the most informative. Physical activity naturally happens when kids are exploring their environment and community. Creating projects for students to do outside and within the community is a huge focus of place-based education; you can't create environmentally and civically responsible students with worksheets. They have to be out and about and experiencing their area. Smith (2013) was the most influential on my developing understanding and respect for place-based education. He summed up my excitement and perceptions of what place-based education is and what it can provide with:

Place-based education cannot be slotted into specific curricular domains such as science or social studies. It is instead an approach to curriculum development and instruction that acknowledges and makes use of the places where students live to induct them into the discourses and practices of any and all school subjects. More than anything else, teachers who use this approach share a perspective about teaching and learning that alerts them to the educational potential of phenomena outside the classroom door. For them, community and place become additional “texts” for student learning (p. 213)

The goals of these units is truly to inspire students to take part in their community and environment. Discovery Peak is wanting to create physically active, community oriented young people who care about their environment through a rigorous educational program that meets students on their level. Through the use of these units, getting kids out and experiencing their community (both socially and environmentally) and keeping active, I believe these lessons will help to meet those goals.

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## Appendix A

# **Community**

## **Grades: K, 1st, 2nd**

**In a multiage setting, kindergarten, first, and second grade students will engage in a place-based, project based unit with an emphasis on physical activity through learning about their community and community service.**

**The purpose is for students to understand their personal community compared to their shared community.**

**While this unit is developed with project-based learning and has a focus on physical activity, it is mostly rooted in place-based education. David Sobel (2004) explains, “Place-based education takes us back to basics, but in a broader and more inclusive fashion... The history, folk culture, social problems, economics, and aesthetics of the community and its environment are all on the agenda.” (p. 13).**

**Created by Kristine Rosevear  
for Discovery Peak Charter School Initiative**

## Community Unit Resource Guide Grades K-2

*Extra spaces are intentionally left to allow for teacher's personal notes and additions.*

### Modules of Community Unit:

Teach sequentially

1. Home Study
2. School Study
3. Town Study
4. State Study
5. Fitness Fun \*\*\* This lesson should be started early in the quarter and revisited throughout.

### Suggested Community Visits and Field Trips:

- Go Fishing.
- Pick Berries.
- Visit different shops that would be willing to provide tours.
- Run the fitness loop.
- Visit Santa's Senior Center.
- Tour the local parks and compare and contrast what you find.
- Explore Chena Lakes.
- Go Skiing.

Go to the public library.

- <http://www.adfg.alaska.gov/>
- <http://livingmontessorinow.com>
- <http://www.momjunction.com>

*These books are suggestions for read alouds to go along with the unit. There is extra room for teachers to add additional resources.*

[illegible]

## Physical Activity Resources

*Alaska states students in grades K-8 must be provided opportunity for 54 minutes of physical activity per school day, this is 90% of the recommended 60 minutes per day (dhss.alaska.gov).*

Depending on the research you find, studies are showing students should not sit longer than 10 - 30 minutes. While physical activity is built into this unit, please utilize some of these quick physical activities if you find the students sitting for long periods of time.

### Online Resources and Apps:

- Brain Gym
- Gonoodle
- BrainBreak
- Lazy Monster

### Print Resources:

- *Making the Brain/Body Connection: A playful guide to Releasing Mental, Physical and Emotional Blocks to Success* by: Sharon Promislow
- *Smart Moves: Why Learning is Not All in Your Head* by: Carla Hannaford
- *Refocus and Recharge! 50 Brain Breaks for Middle Schoolers* by: Responsive Classroom
- *Brain Breaks for the Classroom: Help Students Reduce Stress, Reenergize & Refocus* by: Michelle Gay

## Ongoing Unit Assessment

- Periodically take anecdotal notes on students and their vocabulary used to describe their areas. If there aren't significant notes have one on one discussions with students to ensure understanding.
- Visually check each *My Home* project and make sure the project resembles the home the student has been discussing in class. Pay close attention to fantasy vs. reality.
- Continued discourse on student learning and instructional methods with K, 1, 2 teachers.
- Students will utilize journals to track their kindness assignments.

## Community Module: Home Study

***Students will explore their homes and compare them to each other.***

### FNSBSD Curriculum/Alaska State Standards:

#### *Social Studies Standards:*

- Using words to indicate spatial relationships (e.g., use vocabulary to discuss specific locations within their home, classroom, school and playground). (EQ.K.1)
- Describing different features of the Alaskan landscape. (EQ.K.1-2; GY.B.1, 7)
- Collecting information about the past through interviews, photos, articles, etc. (EQ.1.1, 6; H.A.1-2)
- Describing at least one similarity and one difference among people. (EQ.2-3, 6; CS.B.1)

#### *Kindergarten Language Arts:*

- [K] 1.1.5 Demonstrating understanding of concepts of print including:
  - holding book right side up;
  - reading front to back, top to bottom of page, left to right of page, left before right page;
  - one- to- one word correspondence
  - meaning of the concept of first/last and beginning/end
- The student writes about a topic by:
  - [K] 1.1.1 Writing to express personal ideas using drawings
  - [K] 1.1.2 Dictating or writing words, phrases, or sentences related to a single topic
  - [K] 1.2.1 Writing to express ideas for self and others (e.g., using drawings, symbols, letters, words, sentences)

#### *1st Grade Language Arts:*

- The student revises writing by:
  - [1] 1.4.1 Working with peers or teacher to rearrange and/or add supportive details to improve clarity.
  - [1] 1.4.2 Giving and/or receiving ideas and suggestions about writing and responding appropriately

#### *2nd Grade Language Arts:*

- The student writes about a topic by:
  - [2] 1.1.1 Writing complete sentences with a subject and predicate.
  - [2] 1.1.2 Writing and organizing thoughts into a topic sentence and two support sentences.
- [2] 1.3.1 Reading orally with rhythm, flow, and expression, showing understanding of punctuation (e.g., period, comma, question mark, exclamation point, and quotations) and other conventions of print (e.g., size of print and speech bubbles) at a pace similar to own speech

Module: Home Study	
Learning Objectives	Assessment F=formative, S=Summative
Students will gather information about their homes, both indoors and out.	Worksheet 1: Drawing and sentence construction. (F)
Students will show similarities & differences in their home and school.	Rubric 3: Oral Assessment (F) Worksheet 3: S&D exit slip (S)
Students will create <i>Home</i> section of <i>Sense of Place Creation</i> .	Worksheet 2: <i>Sense of Place Creation: Home</i> (S)

**Materials and Resources:**

- Copy paper for drawing maps
- Worksheets 1, 2, 3
- Rubric 3
- Community helper worksheets (These can be found at <http://livingmontessorinow.com> and <http://www.momjunction.com> with cite search for a particular occupation)
- Kindness Journals (These need to be premade with 15 or more pages of primary lined paper)

**Procedures:***Lesson 1: Introduction:*

- Ask students what they know about their homes.
- Make a brainstorm list of random facts about kids' homes; include both inside and outside facts.
- Have kids tell you what they know about someone else's home. It may be a grandparent, a neighbor, a friend, etc.
- Create a separate list of these items.
- Split students into groups (prearrange groups to make sure there is a fluent reader in each group).
- Tell students they are going to get the chance to explore their homes and share their findings with each other. Their first step is going to be to write down everything they can think of about their home.
- Have groups move to working spaces. Explain to them that one side of their paper is for inside parts of their home, and the other side is for outside parts of their home. They can use words or pictures to describe their place.
  - This should be done using only a pencil.
- After about 15 minutes have students share with their small groups what they recorded. Set a timer and give each student 3 to 4 minutes to share with their group.
- Once this is complete, give students the opportunity to pick ONE part of their home they would like to share with the class. They may present their piece to the class one at a time. This will be a very short share time.
- Hopefully, this gives kids a chance to wake up their brains to all the parts of their houses. Listening to each other talk about parts of their space should inspire them to think of more they would like to add. Allow students to add to their work as their classmates present.

*Lesson 2: Brainstorming*

- Have students get back into their groups, and make changes as necessary to the groups. They can be rather fluid as long as there is a fluent reader in each.
- Pass out the brainstorming worksheet (Worksheet 1).
- Have students work through as a group and identify all the components.
- Let them know if there is anything they don't know that they will be able to check at home tonight, or ask a family member to help them figure it out.
- Be sure to stop the groups and read and discuss questions as you go through. Most of these kids will not be readers.



- At the end of the work session, have them share their findings with their group.
  - These work sessions can be broken up into any amount of time. This is not something that needs to be done in one day or one sitting. Each group will be paced differently.
  - Groups who finish early can do community helper worksheets .

#### *Lesson 3: Similarities and Differences*

- Define similar and different to the class.
- Have students stand up and do a quick movement activity.
- Ask students to go through the room and put a finger on one thing that is similar to their home. Remind them that this means they have this at school and at home. Tell each student to turn to another student and tell them about the thing they have in their home. Each student should get a chance to speak.
- Ask students to go through and put a finger on something in the room that is different from their house. Remind them this means it is here at school, but they do not have one at their home. Tell each student to turn to another student and tell them about the thing they have in their home. Each student should get a chance to speak.
- Repeat the two previous steps until you feel everyone is understanding the concept.
- Challenge students to find one this similar and one thing different with everyone in their group.
- Have students complete the *Similarities and Differences* exit slip (Worksheet 3). This could be done with a partner and their home, or with each students' home and the school.

#### *Lesson 4: My Home*

- Create *My Home* section of sense of place creation (Worksheet 2).
- Have students decorate their home section to include some of the brainstorming elements from Lesson 2.
- Have them pay special attention to the colors they use (make it true to their home), the trees the draw, the pets and people they include.

#### *Lesson 5: How to be a Helper*

- Ask students what it means to be a good helper. Remind them that even though we are talking about our homes, that includes the places outside our homes where we play.
- Make a brainstorm list of all their ideas.
- Explain to them they are going to focus on how to be good helpers at home. As a class, highlight all the ideas that would make a person a good helper at home. Give students a chance to add to the list as well.
- Talk about how during each lesson of the quarter we are going to learn how to be good helpers to our families, our school, and our town.

#### *Lesson 6: Being a Helper*

- From the list generated above have students choose 3 items they think they can make into habits (one item must be something that can be done outside). Talk about what a habit is and how they are formed.
- Have students write down their choice, one on each page, in their kindness journals.
  - Kinder, and struggling, kids may need these written down on their desks to copy rather than copying from the board.

- Tell students they will be keeping track of how many times they are helpers at home to their families. They are going to go home, focus on these three tasks and try to do at least one of them every day.
- When they come back to school, at the beginning of each class they will be keeping track of their progress using tally marks in their kindness journals.
- Allow students time to share their experiences with their classmates. Highlight any discussion about outdoor activism. Examples could include feeding birds, tending to foliage, etc.

## Community Module: School Study

***Students will explore their school and its surrounding area.***

### FNSBSD Curriculum/Alaska State Standards:

#### *Social Studies Standards:*

- Describing or identifying a map or globe. (EQ.K.1; GY.A.1)
- Describing different features of the Alaskan landscape. (EQ.K.1-2; GY.B.1, 7)
- Using a map and terms related to location, direction and distance (e.g., up/down, left/right, near/far, here/there, north/south, east/west). (EQ.1.7-8; GY.A.1)
- Using a simple map to find a location or object. (EQ.1.7-8; GY.A.1)
- Creating a map as a representation of space. (EQ.1.7-8; GY.A.2)
- Locating Alaska on a map and globe. (EQ.1.7-8; GY.A.1)
- Using appropriate resources to answer geographic questions. (EQ.1.7-8; GY.A.4-6)
- Using a compass rose and a map key/legend to interpret information on maps and globes. (EQ.2.3-4; GY.A.4)

#### *Kindergarten Language Arts:*

- Speaking and Listening:
  - Participate in collaborative conversations with a variety of partners about kindergarten topics and texts with peers and adults in small and larger groups
  - Describe familiar people, places, things, and events and with prompting and support, provide additional detail

#### *1st Grade Language Arts:*

- Speaking and Listening
  - Participate in collaborative conversations with a variety of partners about grade 1 topics and texts with peers and adults in small and larger groups
  - Speak audibly and express thoughts, feelings, and ideas clearly

#### *2nd Grade Language Arts:*

- Speaking and Listening
  - Participate in collaborative conversations with a variety of partners about grade 2 topics and texts with peers and adults in small and larger groups
  - Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion)
  - Speak clearly, audibly, and at an appropriate pace for the type of communication needed

Module: School Study	
Learning Objectives	Assessment F=formative, S=Summative
Students will gather information about their school, both indoors and out.	Worksheet 1: Drawing and sentence construction. (F)
Students will familiarize themselves with parts of a map.	Exit Slip: Compass Rose (F)
Students will utilize a map to explore an area.	Rubric 7: Map Interpretation (S)
Students will create a map of their outdoor school area.	Rubric 5: Whole class map creation (S)

**Materials and Resources:**

- Various maps
- Quarter sized sheets of paper (1 per student)
- Community Helpers Worksheets
- Worksheet 1
- Kindness Journals
- Sample map of your school
- Large piece of butcher paper

**Procedure:***Lesson 1: Introduction:*

- Take a tour of the school.
- Yes, many of the students will already know most of the spaces shown, but utilize proper vocabulary and discuss directions including:
  - Front, back, right, left, north, south, east, west, here, there, near, far, up, down
    - Not all students will be familiar with these terms, but they will be discussed later.
  - Make sure to show them somewhere they usually aren't allowed to go, like the boiler room.
- Ask students if they learned anything new about the school on their tour.
- Have students discuss with a partner some similarities and differences of their home and the school.
- Have students select a location in the building and give their partner oral directions on how to get there.
  - This will be messy, but they can start practicing utilizing the words introduced.

*Lesson 2: Map Exploration*

- Lay out different kinds of maps; topo, physical, political, globe, etc.
- Let kids walk around, handle, and explore the maps.
- Settle the students and talk to them about why maps are different: They all have different purposes.
- Ask students things like:
  - What would you use a map for?
  - How big can maps be? Can you carry a map that big?
  - What is the purpose of a globe?
  - What kind of symbols do you see? How do you know what they mean? Are they simple or complex?
- After this discussion, explain to students they will be learning about similarities of physical maps. These maps are used to find things and show landmarks and towns.
- Show students a compass rose. Discuss the parts. Teach them Never, Eat, Soggy, Waffles to help them remember the cardinal directions.
- Vocabulary to focus on:
  - North, South, East, West, Compass Rose, Cardinal Direction
- Have students explore the maps again and find the compass rose on each map.

- For an exit slip, have students draw a compass rose on a quarter sheet of paper and label it with the directions. Tell them to write one way the compass rose has helped them explore a map today.

### *Lesson 3: Treasure Map!*

- Before the lesson:
  - Hide desired prizes throughout the school (two or three for each group would be ideal). Be sure to color code the prizes so if another group finds them, they won't pick them up.
    - At least one prize should be a helpers worksheet for students to complete as they finish their hunt and move back to class.
  - For each group, utilize an emergency exit map (make sure there is a compass rose) and place Xs at the areas where their prizes are hidden. Be sure to also mark a "You are here" place as well.
  - Students may start in different locations of the building as well, if desired.
  - I suggest leaving at least one prize with an adult who will be willing to talk with students as they find the prize. This will allow for a solidification of direction skills, practicing manners and oral communication skills, as well as ensure management of the class.
  - Be sure to include an outdoor component if supervision allows.
- When the students come in, break them into desired group size, making sure their groups have at least one second grader with them.
- Explain that they are going on a treasure hunt and everyone will be getting a map to lead them to their treasure.
- Distribute the marked maps and have children see if they can determine the location of their treasure without leaving the room.
- Allow the groups to leave the room and work together to see if they can find their prizes. Remind them to only pick up their prizes and allow other groups to find their own booty.
- Rove with the children and encourage them to use the direction words discussed before.
  - Are they turning right? West? Encourage them to look at and utilize their compass rose.
- Return to the classroom as students finish.
- Ask them what they found easy and what they found more difficult.
- Follow up this discussion with asking each student *how* they used their map to find a place in the school. These questions should show the ability to interpret map data. Assess with Rubric 7.

### *Lesson 4: Making a Map*

- **Day 1:** Tell students we get to spend a couple classes outside!
- Explain to them their goal today is to visit some of their favorite places on school grounds (you may venture further depending on campus space and parental permissions, but stay within their normal exploring space when at school).
- Take students outside. Allow them to play and discover and share their ideas with each other. Several times during the outing have students gather for a class discussion. Talk to them about looking at what spaces are next to each other and how large their area is. Use the word "landmark" when talking about important physical aspects of the space.

- Are the garden and the school next to each other, or is there something in between?
  - Is the playground next to the field?
  - Where is the road?
- This discussion should get kids paying attention to places in relation to each other.
- This should be at least an hour outside with a mix of play and discussion.
- While outside have students gather foliage and encourage questions about natural elements. Provide students with plant and animal identification books.
- Each child should be expected to report back with one similarities and differences claim about natural elements. This can be assessed using Rubric 3 if desired.
- **Day 2:** Tell students we are going outside again, but this time with clipboards.
- Include a talk about symbols. As a class create some ideas for symbols for spaces they see outside and write them on the board. Stress that it is important to use small, simple symbols so that maps don't get jumbled. Symbols should include natural and manmade elements of the space.
- Distribute a *school map* worksheet to each student, with a clipboard and pencil (don't be a rookie, bring out 1,000 extra pencils).
  - *The school map worksheet will need to be created by the teacher. It should simply be piece of white paper with an outline of the school on it. It should allow for students to create the spaces they explore on the paper as well. It must include a compass rose.*
- Tell students they are going to make a map of their outside spaces and include some of their favorite things they explored during last class.
- Take the students outside and pick one or two places to help them add to their map. Everyone should stand together and face the same direction. Talk about where things are compared to the school. Is the playground close to the front doors of the school, or around the backside? Where is your favorite tree? Are there natural landmarks close? Model how to add a small playground on their map and where it should go. More accelerated students should include at least 4 places, moderate students should include 3 places and emerging learners need to include 2 places beside the places modeled by the teacher. This could be easily included in the map worksheet as a small checklist.
- Remind students to use symbols rather than trying to draw everything.
- Collect the maps when you come inside so they can be used for the next portion of the lesson.
- **Day 3:** Get a large piece of butcher paper and recreate the worksheet given to students.
- Hang it so all the students can see.
- Have student volunteer ideas on where to place things on the map. Students may give a thumbs up or down if they agree with each student's idea. If the student needs to make adjustments, have the class help them determine their error and how to fix it. Students should also be deciding how to represent the spaces discussed.
- Continue this process until there is a comprehensive map of the school and the places surrounding the school.
- Create a map key with the kids for their symbols. This will be teacher led and simply an exposure activity for the students.

- Hang the finished map in an area of the school where all students can see it and talk about it.
- Assess student participate in the discussion with Rubric 5.

#### *Lesson 5: My School*

- Create *My School* section of sense of place creation (Worksheet 1).
- Have students decorate their school section to include some of the aspects on their map, as well as at least one person at the school they appreciate.
- Have them pay special attention to the colors they use (make it true to their school), the landmarks the draw, and people they include.
- Include the name of the school on their picture.
- Put this together with their *My Home* section and talk about similarities and differences between the two.

#### *Lesson 6: School Helpers*

- Remind students that we are focusing on how to be helpers.
- Facilitate a discussion on how helping at home has been students feel. Ask them if they have family members who have been appreciative of their efforts.
- Brainstorm a list of ways to be helpers at school and we need to remember the outdoor portions of this place as well.
- Have students pick three things ideas they would like to try on a regular basis (one of them with outdoor elements) and have them write these ideas down in their kindness journals.
- Remind students they will be keeping track of how many times they are helpers at school. They are going to focus on these three tasks and try to do at least one of them every day.
- At the beginning of each class they will be keeping track of their progress using tally marks in their kindness journals. They will continue to track their home kindness as well (This may fall away from some of the younger students, they may not be able to focus this in more than one area and remember enough of it to record their info).

#### *Lesson 7: Continuing Kindness*

- At the beginning of classes, or as classes need a break utilize one of their kindness ideas to get kids up and moving. These can be recorded in their *Kindness Journals*.

#### *Lesson 8: School Action*

- Help students find a commonality in the list of outdoor elements they brainstormed in *Lesson 6*. Is there something the majority of the class found important?
- Facilitate a discussion amongst the children to see if they found something outside the school that bothers them that they would like to change.
- Once students have decided on an element they would like to change, help them to come up with a plan of action.
- An example of this could be students noticing the parking area is getting filled with litter. Ask them how they would like to change it. They will come up with things like pick up trash and make signs asking others to do the same.
- Assist the students with carrying out their plans for a couple of weeks. Check in periodically to determine if they believe their efforts are making a differences. If yes,

keep going. If no, guide them into changing their plan to create the change they want to see.

\*\*\*Disclaimer: This lesson can become as big or as small as you let it. It could take over the entire quarter if it does not stay contained. I suggest encouraging students to find something small to change so this is a positive experience. We don't want them to take on something huge and lose steam, or feel as though they are failing. This is an introduction to elements of Discovery Peak they will see in their future years; we want them to have a feeling of success. .



## Community Module: Town Study

*Students will explore North Pole.*

### FNSBSD Curriculum/Alaska State Standards:

#### *Social Studies Standards:*

- Demonstrating positive interaction with group members. (EQ.1.5-6; G/C.E.7)
- Describing at least one similarity and one difference among people. (EQ.2-3, 6; CS.B.1)
- Differentiating between neighborhood, town and state. (EQ.1.7-8; GY.A.4; GY.B.1-4)
- Identifying characteristics of a neighborhood or community using resources such as road signs, landmarks, models, maps and photographs. (EQ.1.7-8; GY.B.1-5)
- Learning about others through books, multimedia, interviews and newspapers and by participating in community and school events. (EQ.K.1-3; CS.A.1; CS.B.1-2; CS.C.4; CS.D.5)
- Working positively together in a group. (EQ.K.1-5; G/C.E.1-2, 7)
- Contributing to the life of the class and the school. (EQ.K.1-5; G/C.E.6)
- Naming a job that people have in the home, school or other business. (EQ.K.1; G/C.G.1)
- Participating in activities as a buyer or seller. (EQ.K.1, 3-5; G/C.G.3-4)
- Telling the difference between people's wants and needs. (EQ.K.1; G/C.G.2-3)

#### *Kindergarten Language Arts:*

- [K] 1.1.5 Demonstrating understanding of concepts of print including:
  - holding book right side up;
  - reading front to back, top to bottom of page, left to right of page, left before right page;
  - one- to- one word correspondence
  - meaning of the concept of first/last and beginning/end
- The student writes about a topic by:
  - [K] 1.1.1 Writing to express personal ideas using drawings
  - [K] 1.1.2 Dictating or writing words, phrases, or sentences related to a single topic
  - [K] 1.2.1 Writing to express ideas for self and others (e.g., using drawings, symbols, letters, words, sentences)

#### *1st Grade Language Arts:*

- The student revises writing by:
  - [1] 1.4.1 Working with peers or teacher to rearrange and/or add supportive details to improve clarity.
  - [1] 1.4.2 Giving and/or receiving ideas and suggestions about writing and responding appropriately

#### *2nd Grade Language Arts:*

- The student writes about a topic by:
  - [2] 1.1.1 Writing complete sentences with a subject and predicate.
  - [2] 1.1.2 Writing and organizing thoughts into a topic sentence and two support sentences.
- [2] 1.3.1 Reading orally with rhythm, flow, and expression, showing understanding of punctuation (e.g., period, comma, question mark, exclamation point, and quotations) and other conventions of print (e.g., size of print and speech bubbles) at a pace similar to own speech.

Module: Town Study	
Learning Objectives	Assessment F=formative, S=Summative
Students will define community.	Rubrics 2&5: Class Discussion (F)
Students will explore the difference between wants and needs.	Double Bubble Map (F)
Students will explore how their needs are met in their community.	Worksheet 4: Grocery Store Checklist (F) Rubric 4: Understanding Resources (F)
Students will identify different occupations and their contributions to a community.	Rubric 2: Observe conversations between students about jobs and volunteer positions. Continue activity and progress as long as necessary to build understanding. (F)

### Materials and Resources:

- Community helper worksheets
- Worksheets 2, 4
- Kindness Journals
- Prearranged field trips with ADF&G and North Pole Safeway
- Coloring pages for firemen, police officers, teachers, military personnel, and caregivers

### Procedure:

#### *Lesson 1: What Do We Know?*

- Ask students what North Pole is. This will help to gauge where they are with town identity.
- Discuss the different places and things they described. There may be some time spent differentiating between Fairbanks and North Pole.
- Discuss that towns are made up of people and places.
- Define community as: “a group of people who live in the same area (such as a city, town, or neighborhood)” (<http://www.learnersdictionary.com/>)
- Talk with kids about all of us being in the same community and living or working together.
- Create lists of different places in North Pole the the students frequent or pass by. These can be indoor places, but make sure they include some outdoor spaces as well.
- Tell students they will be exploring different places within the North Pole area and finding out about different jobs and community places.

#### *Lesson 2: Need vs. Desire*

- Discuss with children what basic needs humans must have to live.
  - Food, water, shelter
- Talk about the difference between these things and some of the things we simply want to have. Sample discussion questions:
  - Do you need a phone to live?

- Do you need a big house or a warm house? Why?
  - Do you need juice, or is plain water acceptable?
  - Do you need cars? This may bring up some lifestyle differences. Model using compassionate language among the differences the children recognize.
- Distribute blank paper to students. They will be making double bubble maps (this will be part of a program utilized by the entire school, so students will be familiar) to show how some of our wants and needs overlap. For example, pizza is a food, they may want pizza and need food so it would go in the center.
- Allow students to work in groups to complete their double bubble maps to compare and contrast wants vs. needs. This may also need to be done as a whole group first. Determine understanding before allowing them to work in small groups.

### *Lesson 3: Getting Our Needs Met Field Trips*

- Lead a class discussion on places we can meet our basic human needs in our community. The class should come up with the following:
  - Food: Grocery store, gardening, gathering, hunting
  - Water: Water treatment plant, groundwater
  - Shelter: Homes, school, churches, other common buildings
- Tell the class we will be taking different field trips to learn about where our food and water come from. One will be to Chena Lakes and one will be to the local grocery store.
- **Field Trip #1:** Prearrange a trip to North Pole Safeway. They give tours of their departments to young children so they can learn the basics of the bakery, floral department, deli, butcher, and stocking. This will give students a chance to see that there is more to their local stores than what they see and that everyone has a specific job and they have to work together to keep things running smoothly.
- Prepare the students by going over their *Grocery Store Checklist* before walking to the store for the trip. Explain they will need to check off each area as they visit and draw or write something so they can remember their favorite part. Explain this is note taking skills.
- When you return from the trip (this may have to happen the following day), allow students to share their journaling and discuss what they discovered. Students are expected to share about the last answer on their notes page.
- Remind students there are other places to get food that we will be exploring at Chena Lakes.
- **Field Trip #2:** Prearrange a trip to Chena Lakes. Contact parks and recreation as well as ADF&G. ADF&G provides informational classes for all ages and love to present to kids. Ask for information on groundwater, hunting/trapping, and gathering. They may not be able to cover all the areas in depth, but they will provide info within the areas.
- Before leaving explain to the children the purpose of their trip. We will be looking at one of our larger water sources, learning about gathering food (probably berries), and talking about hunting and trapping.
- Provide students with journals to sketch and write as they find out new information. ADF&G may have worksheets for the students to complete and they may not.
- The goal is for this field trip to be run by ADF&G, however you may need to be ready to have discussions and explorations with students. Ideas:

- Scavenger hunt for different types of trees.
- Discover animal prints in the snow.
- Check out water temperature.
- Catch a fish.

#### *Lesson 4: Community Helpers: Safety*

- Ask students if they remember the difference between wants and needs. Have them list the three things humans need to survive.
- Discuss the idea that we all also need to stay safe. Ask the kids if they know of anyone in the community who has a job that helps them stay safe.
- Have students break into pairs and draw a picture of someone who is a helper in their community. They can draw or write as many different kinds of people as they can think of.
- Talk about the difference between people who keep us safe and community helpers or workers.
- Come back together as a class and compile a list. Be sure to include:
  - Safety: Firemen, police officers, teachers, caregivers, and military personnel
  - Other Helpers: post office workers, groundskeepers, grandmas, and veterinarians
- Allow students to pick from the helpers coloring pages. Ensure there is a healthy representation of each throughout the class.
- Students need to color their community helper in a realistic manner. This is an excellent time to discuss different parts of helper jobs while students color. Or read aloud from books from the reading selection above.
- Once students complete their coloring have them include some of the tools each helper may need for their job. These can be drawn or written in.
- Have students talk with each other about their helpers. They can talk about how they are all different but all helpers.

#### *Lesson 5: How Can We Help?*

- Utilizing YouTube, pick a couple songs that have to do with community helpers or occupations.
- Tell students to not answer this question out loud but be ready to share their answer with their partner. What do you want to be when you grow up?
- Have students move through the room dancing or whatever they choose while they think up an answer to their question. When the music stops they put one hand in the air and high five the closest person; they are now partners. Repeat the question and give each student one minute to answer. Be sure to call switch so the next person gets a chance to talk. Encourage students to elaborate on their answers. One word is not ok.
- Repeat the previous step with the following questions (they can answer the same question a couple times to help them solidify their answer, or change it):
  - Would you like to be a police officer? Why?
  - Do you want to work inside or outside?
  - What is your favorite way to help?
  - Would you like to work with animals?
  - *Fill in other questions as necessary.*

- Remind students that we are focusing on how to be helpers.
- Brainstorm a list of ways we can help in the community. This is a great time to talk about volunteering versus a paid job.
- Have students pick three things ideas they would like to try on a regular basis and have them write these ideas down in their kindness journals.
- Remind students they will be keeping track of how many times they are helpers in their community. They are going to focus on these three tasks and try to do at least one of them every day.
- At the beginning of each class they will be keeping track of their progress using tally marks in their kindness journals. They will continue to track their previous kindness as well (This may fall away from some of the younger students, they may not be able to focus this in more than one area and remember enough of it to record their info).

*Lesson 6: Continuing Kindness*

- At the beginning of classes, or as classes need a break utilize one of their kindness ideas to get kids up and moving. These can be recorded in their *Kindness Journals*.

*Lesson 7: My Town*

- Create *My Town* section of sense of place creation (Appendix B).
- Have students decorate their town section to include one place we visited and one helper we discussed.
- Label the town “North Pole” at the top of the picture.
- Put this together with their *My Home* and *My School* sections and talk about similarities and differences. Rubric 3 can be used here for formative assessment.

## Community Module: State Study

***Students will explore Alaska as a state and its relation to their other places.***

### **FNSBSD Curriculum/Alaska State Standards:**

#### *Social Studies Standards:*

- Demonstrating positive interaction with group members. (EQ.1.5-6; G/C.E.7)
- Differentiating between neighborhood, town and state. (EQ.1.7-8; GY.A.4; GY.B.1-4)
- Identifying characteristics of a neighborhood or community using resources such as road signs, landmarks, models, maps and photographs. (EQ.1.7-8; GY.B.1-5)
- Working positively together in a group. (EQ.K.1-5; G/C.E.1-2, 7)
- Contributing to the life of the class and the school. (EQ.K.1-5; G/C.E.6)

#### *Kindergarten Speaking & Listening:*

- Participate in collaborative conversations with a variety of partners about kindergarten topics and texts with peers and adults in small and larger groups
- Follow agreed- upon rules for discussions (e.g., keeping hands, feet, and objects to self, looking towards speaker, listening without interrupting, listening to others, and taking turns speaking about the topics and texts under discussion)
- Continue a conversation through multiple exchanges
- Listen attentively to the telling or reading of a text

#### *1st Grade Speaking & Listening:*

- Participate in collaborative conversations with a variety of partners about grade 1 topics and texts with peers and adults in small and larger groups
- Ask questions to clear up any confusion about the topics and texts under discussion
- Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood Understand, restate, and follow two- step directions
- Listen for meaning in conversations, discussions, and stories
- Use appropriate listening behaviors by demonstrating respectful body language
- Speak audibly and express thoughts, feelings, and ideas clearly
- Describe people, places, things, and events with relevant details, using descriptive words and expressing ideas and feelings clearly
- Answer who, what, where, when, and why questions

#### *2nd Grade Speaking & Listening:*

- Participate in collaborative conversations with a variety of partners about grade 2 topics and texts with peers and adults in small and larger groups
- Tell stories about self, others, and ideas using logical order
- Speak clearly, audibly, and at an appropriate pace for the type of communication needed Summarize or paraphrase a conversation or story
- Follow agreed- upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion)
- Build on others' talk in conversations by linking their comments to the remarks of others
- Actively participate in conversation; listening and looking at the person who is speaking as appropriate

Module: State Study	
Learning Objectives	Assessment F=formative, S=Summative
Students will explore the differing sizes of their home, school, town, and state.	Rubric 5: Class Discussion: Making comparisons on size within community. (F)
Students will identify similarities and differences between their different levels of place.	Rubric 1: Sense of Place Creations. (S)
Students will practice their grade level speaking and listening skills through class and small group discussions.	Rubric 2: Speaking and Listening (S)

### Materials and Resources:

- Community helper worksheets
- Worksheet 2
- Coloring pages for firemen, police officers, teachers, military personnel, and caregivers

### Procedure:

#### *Lesson 1: How Big Is a State?*

- Present students of maps of Alaska. Ask them if they know what it is. Talk about the different parts such as islands, peninsulas, the interior, the Canadian border, etc.
- Show students where North Pole is on the map and discuss how small the dot is.
- Have students find small things in the classroom. Talk about comparisons within their classroom.
  - Examples: "This eraser is smaller than our classroom, just like our town is smaller than our state. The eraser is inside the classroom, just like our town is inside our state."
- Have students stand up and find a partner. Tell them to find something inside the classroom and model the language. Have students show their partner something in the room and model the sentence above. Each student should talk about it.
- Talk to students about how our school is one building inside our town. On a map it would just be a little dot. Have students repeat the activity above with their new places in mind.
- Repeat this for their homes as well.

#### *Lesson 2: Comparisons*

- Explain to students we need to find four things in the classroom to represent our state, our town, our school, and ourselves.
- These four things will have to be different in sizes to represent each place. Discuss which one will have to be the largest, smallest, and so on.
- Have students explore the classroom and discover items they think might work.

- Have a class discussion with students giving suggestions on items to use for the representation. Use their suggestion to compile a group of four things to represent the places.
- Use the visual to jump start a conversation about how each of these things fits inside each other.
  - This is a great place to use comparison language. Encourage kids to state their findings correctly and discuss their findings with other students.

*Lesson 3: Sense of Place Creation Completion*

- Have students complete their state portion of their sense of place creation. The map should be colored green where there is land, blue for water, and put a heart close to where North Pole is on the map. More capable students can label North Pole as well.
- Makes sure students label their state “Alaska” across, or just outside the map.
- Add all the Sense of Place creations together and bind with rings, or simply staple them together.
- Have a final class discussion about how each of these places are different and that we live in each one of them.
- Assess the final product with Rubric 1.



## Community Fitness Fun

\*\*\*This lesson should be started early in the quarter and revisited between unit sections.

***Students will explore physical recreation in their area.***

### FNSBSD Curriculum/Alaska State Standards:

*Physical Education Standards:*

- Standard 5: The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self expression, and/or social interaction.

Module: Fitness Fun	
Learning Objectives	Assessment F=formative, S=Summative
Students will recognize enjoyment, challenge, self expression and social interaction through physical activity.	Rubric 6: Being a team player (F)

### Materials and Resources:

- To be determined by student selected activities.

### Procedure:

*Lesson 1: What is Physical Recreation?*

- Ask the class, "What is physical recreation?"
- Have students brainstorm on scrap paper.
- Collect their ideas through a class discussion and begin to write a class list.
- Explain to them that physical recreation is simply playing and being active.
- Have students return to their brainstorming and come up with more examples.
- Tell students we are going to do some of these activities throughout the school year!

*Lesson 2: North Pole Recreation*

- Narrow the list created in the previous lesson to things that can be done in North Pole.
- Narrow it even more to things that can be done by a whole class at one time.
- Discuss how different activities can only be done at certain times of year.
  - Skiing and sledding are only done in the winter.
  - Swimming in the lake it for summer time.
- Select 3-4 items on the list that students may want to try while exploring their community.
- Explain to students that between unit lessons we will be taking mini field trips to explore different recreation opportunities in the North Pole area.

*Teacher Responsibilities*

- This lesson will have some prep involved depending on what is chosen to be done.
- Things to determine:
  - Do we need transportation? (bussing)
  - Do we need equipment? (skis)
  - Do we need volunteers? (Any field trip should have parent volunteers.)

## Reflection

The Community lesson was the most difficult for me to create, but it taught me the most. I struggle with understanding the needs of primary elementary students. I had to call several colleagues and reread development books to ensure my ideas were age appropriate. It is always a nice refresher to look at the younger grades and realize where my students are coming from.

### *Anticipated Struggles*

There was some discussion about student slowdown being a struggle since these explorations are selected by choice. With other classes doing completely different projects, some may be more exciting than others to different students. Each of the explorations will have community involvement pieces where students will be going outside of the classroom. When other classes are doing their community involvement pieces, field trips, and projects it may be difficult to keep focus in class. Reminding students that they have exciting pieces coming soon will help. Also, having a curriculum map for students to see, so they know when their exciting bits are coming up, could be helpful.

I am always weary of group work with younger students. It is wonderful when there are adults to help monitor discussions and tasks, but the students lose focus more easily and quicker than older students. However, I do love the discussions they have. Five to eight year olds are very excited about school and often have very exciting, explorative conversations. So, I decided to rely heavily on group work throughout these lessons. This may mean that parent volunteers are a necessary part of the classroom. As mentioned in the Iditarod reflection, this should be an easier task than usual because families have signed a contract committing to volunteer hours.

In the *Town Study* lesson much of the core learning is based around field trips. This is always a struggle because behaviors can shift and presenters are a huge part of it. If you have a great presenter who is comfortable with the age group these lessons will be fantastic. However, this is not a guarantee.

The *Fitness Fun* should be an excellent way to inspire kids to utilize what North Pole has to offer in the way of physical recreation. The only part of this I am concerned about is being able to acquire the equipment we may need. Since it is a student led selection, it may be difficult to get things in time for the expeditions. There will have to be a discussion with students that not all their ideas will be a possibility because of time and money constraints. I do want to keep the lesson student led; I think it is important for the students to share their experiences and they may have a family member with access to an area we would otherwise not be able to go. Risk Management may not love the ideas we come up with. Again, this lesson put a lot of pressure on the teacher to gain access to equipment and may take extra time getting approval for some activities the class wants to experience.

Differentiation within these grade levels is difficult. There are kindergartners who can read and second graders who cannot. Therefore, the teacher must know the class and be able to know when they should ask a student to write a response rather than draw a picture. These types of decisions cannot be made on a grade to grade basis, but rather a student to student basis.

*Goals met:*

- Physical Activity:
  - *Fitness Fun*: Students will explore the physical recreation opportunities in their area. It also allows them the opportunity to share some of their favorite ways to stay active.
  - Throughout the lessons there was a focus on getting kids out of their chairs and moving throughout the classroom, school, and outdoors.
    - Home Study: Lesson 3:
      - Students move throughout the room to identify similarities and differences in object between their home and school.
    - School Study: Lesson 3

- Students explore the entire school through reading a map and going on a treasure hunt.
  - School Study: Lesson 4
    - Students explore the outdoor portion of their school for several days with the expectation of creating a map of the area.
  - Town Study: Lesson 4
    - Students participate in multiple field trips. One will be within walking distance of the school. The other trip will be in an outdoor recreation area for them to explore.
  - Town Study: Lesson 6
    - Students move throughout the room (dance) to share their answers with multiple classmates.
  - State Study: Lesson 2
    - Students get up and explore the classroom to find scale appropriate objects to use as comparisons.
- Place-Based:
  - Each component of the *Sense of Place Creation* provides students opportunity to explore their place through a different lens and identify the different aspects of their community.
  - The *Fitness Fun* lesson provides students with the ability explore their community and just enjoy the outside elements; allowing them a time to connect with their environment and cultivate a relationship with nature.
- Project-Based:
  - The compilation of the *Sense of Place Creation* will provide students with an on-going project that allows for student exploration. It provides instances for leveled learning and individualized learning needs.
  - The *Fitness Fun* Module provides for student driven exploration.
  - Within project-based learning there is a component of meeting children at their need level. I believe the strongest representation of meeting children at their need level is shown in the group make ups within the lessons. Ensuring there is a reader in each group to help guide and facilitate. Also, the inclusion of pictures in the worksheets and the option of drawing an answer rather than writing it is showing differentiation for the groups.

## **Worksheets**

Worksheet 1: Home Exploration

Worksheet 2: Sense of Place Creation

Worksheet 3: Similarities and Differences

Worksheet 4: Grocery Store Checklist

- 1. Draw a picture of your favorite place in your home.**
- 2. Write one sentence to describe it.**

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**1. Where do you sleep?**

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**2. Where do you eat dinner?**

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**3. Where do you spend time with your family?**

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**4. Where do you play by yourself?**

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**5. Where do your pets sleep?**

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**6. Where do your other family members sleep?**

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## Sense of Place Creation

As students finish each portion of this assignment, it needs to be bubble cut and pasted onto a piece of construction paper. The dimensions of the paper can be found in the directions for each step.

### My Home:

- Students should select on the the four images for houses.
- Cut a class size amount of 6"x6" pieces of construction paper.
- Depending on student ability, some students my need the traceable "My Home" words, otherwise have students write these words at the bottom of their home picture.
- The houses will need to be cut out (bubble cut preferred) and pasted onto the construction paper.
- Have students complete it with the words "My Home" at the base of the picture.

### My School:

- Cut a class size amount of 8"x8" pieces of construction paper.
- Depending on student ability, some students my need the traceable "My School" words, otherwise have students write these words at the bottom of their school picture.
- The schools will need to be cut out (bubble cut preferred) and pasted onto the construction paper.
- Have students complete it with the words "My Home" at the base of the picture.

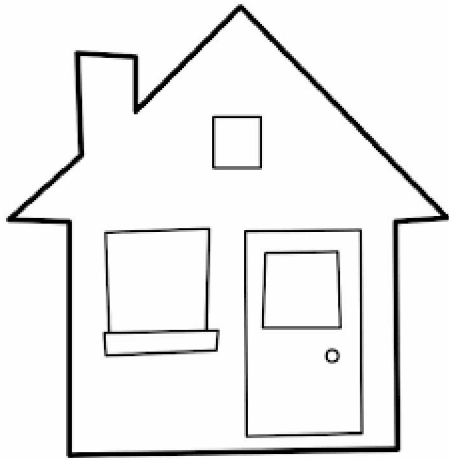
### My Town:

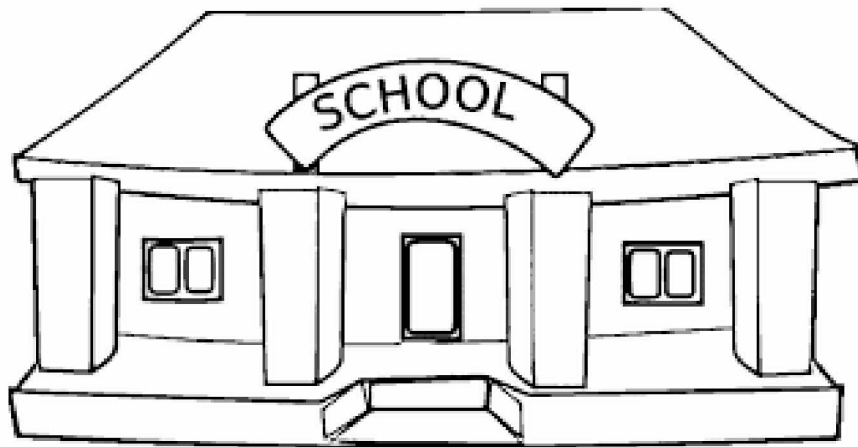
- Cut a class size amount of 10"x10" pieces of construction paper.
- Depending on student ability, some students my need the traceable "My Town" words, otherwise have students write these words at the bottom of their town picture.
- The pictures will need to be cut out (bubble cut preferred) and passed onto the construction paper.
- Have students complete it with the words "My Town" at the base of the picture.

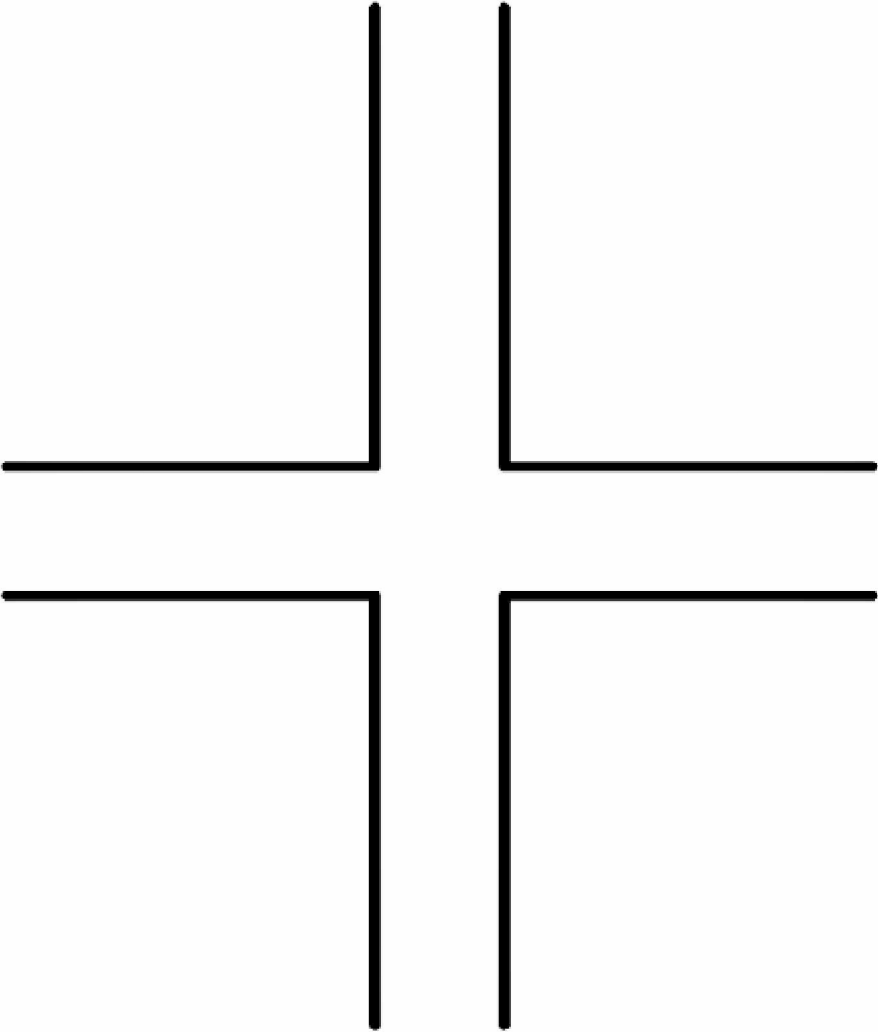
### My State:

- Cut a class size amount of 12"x12" pieces of construction paper.
- Depending on student ability, some students my need the traceable "My State" words, otherwise have students write these words at the bottom of their state picture.
- The maps will need to be cut out (bubble cut preferred) and passed onto the construction paper.
- Have students complete it with the words "My State" at the base of the picture.

Worksheet 2







# ALASKA



## Worksheet 2

My Home

My School

My Town

My State



## Similarities and Differences

Write or draw one thing that is the same in both places and one thing that is different.

**The Same:** 😊 😊

**Different:** 😊 😞

## Grocery Store Checklist

*When you visit each place, check it off. Check off each activity as you do it.*

### Places to See:

\_\_\_\_\_ Bakery Department 

\_\_\_\_\_ Floral Department 

\_\_\_\_\_ Deli Department 

\_\_\_\_\_ Meat Department 

\_\_\_\_\_ Produce Department 

\_\_\_\_\_ Stock Room 

### Things to Do:

\_\_\_\_\_ Ask a question 

\_\_\_\_\_ Try a new food 

\_\_\_\_\_ Find (1) thing we can hunt or gather in Alaska.

\_\_\_\_\_ Find (1) fruit or vegetable we can grow in Alaska that we must plant.

Draw or write **HOW** you can get one of these resources from our **LOCAL** environment (What comes from here and how do we get it?)

## **Rubrics**

Rubric 1: Sense of Place Creation

Rubric 2: Speaking & Listening

Rubric 3: Compare and Contrast

Rubric 4: Understanding Resources

Rubric 5: Group Discussions

Rubric 6: Teamwork

Rubric 7: Map Interpretation

### Sense of Place Creation

For use on completed Sense of Place Creation

CATEGORY	4	3	2	1
<b>Fantasy Vs. Reality</b>	Pictures go well with the text and there is a good mix of text and graphics. All pictures are grounded in reality.	Pictures go well with the text, but there are so many that they distract from the text. Most pictures are grounded in reality.	Pictures go well with the text, but there are too few and the project seems "text-heavy". The pictures are minimally grounded in reality.	Pictures do not go with the accompanying text or appear to be randomly chosen. The pictures are not grounded in reality.
<b>Neatness</b>	The project has exceptionally attractive formatting and well-organized information.	The project has attractive formatting and well-organized information.	The project has well-organized information.	The project's formatting and organization of material are confusing to the reader.
<b>Knowledge Gained</b>	Students can accurately answer all questions related to facts in the project and to processes used to create the project. Shows complete understanding of relations between elements.	Students can accurately answer most questions related to facts in the brochure and to processes used to create the project. Student shows of understanding relations between most elements.	Students can accurately answer most questions related to facts in the project. However, they struggle to understand the creation process. Student only recognizes relations between one or two elements.	Students appear to have little knowledge about the facts or processes used in the project. Student cannot recognize relations between project elements.
<b>Content - Accuracy</b>	All facts in the project are accurate.	99-90% of the facts in the project are accurate.	89-80% of the facts in the project are accurate.	Fewer than 80% of the facts in the project are accurate.

## Speaking & Listening

Can be used with multiple lessons throughout the unit in totally or in parts.

CATEGORY	4	3	2	1
<b>Speaks Clearly</b>	Speaks clearly and distinctly all (95-100%) the time, and mispronounces no words.	Speaks clearly and distinctly all (95-100%) the time, and mispronounces one word.	Speaks clearly and distinctly all (85-95%) the time, mispronounces no more than one word.	Often mumbles or cannot be understood OR mispronounces more than one word.
<b>Uses Complete Sentences</b>	Always (99-100% of the time) speaks in complete sentences.	Mostly (80-98% of the time) speaks in complete sentences.	Sometimes (70-80% of the time) speaks in complete sentences.	Rarely (less than 70% of the time) speaks in complete sentences.
<b>Stays on Topic</b>	Stays on topic 100% of the time	Stays on topic most of the time (90-99%)	Stays on topic some of the time (75-89%)	It was hard to tell what the topic was.
<b>Collaboration with Peers</b>	Always listens to, shares, with , and supports the efforts of other in the group. (100%) Tries to keep people working well together.	Usually listens to, shares, with , and supports the efforts of other in the group. (90-99%) Does not cause turmoil in the group.	Always listens to, shares, with , and supports the efforts of other in the group (75-89%), but sometimes is not a good team member.	Rarely listens to, shares, with , and supports the efforts of other in the group. (Less than 75%) Often is not a good team member.
<b>Volume</b>	Volume is loud enough to be heard by all intended audience members.	Volume is loud enough to be heard by all intended audience members at least 90% of the time.	Volume is loud enough to be heard by all intended audience members at least 80% of the time.	Volume is too soft to be heard by audience members.
<b>Content</b>	Shows a full understanding of the topic. (100%)	Shows a good understanding of the topic. (90-99%)	Shows understanding of parts of the topic.	Does not grasp the topic.
<b>Listens to Other Presentations</b>	Listens intently. Does not make distracting noises or movements.	Listens intently but has 1-2 distracting noises or movements during presentation.	Sometimes does not appear to be listening, but is minimally distracting.	Sometimes does not appear to be listening and has consistent distracting noises and movement.

## Compare and Contrast

Intended for use with *Home Study* module, but can be utilized throughout the unit.

CATEGORY	4	3	2	1
<b>Similarities</b>	Student is able to orally discuss on similarities. They are able to answer multiple questions about similarities with 100% accuracy.	Student is able to orally discuss on similarities. They are able to answer multiple questions about similarities with 90-99% accuracy.	Student is able to orally discuss on similarities. They are able to answer multiple questions about similarities with 75-89% accuracy.	Student cannot orally discuss on similarities. OR They are able to answer multiple questions about similarities less than 75% accuracy.
<b>Differences</b>	Student is able to orally discuss on differences. They are able to answer multiple questions about differences with 100% accuracy.	Student is able to orally discuss on differences. They are able to answer multiple questions about differences with 90-99% accuracy.	Student is able to orally discuss on differences. They are able to answer multiple questions about differences with 75-89% accuracy.	Student cannot orally discuss on differences. OR They are able to answer multiple questions about differences less than 75% accuracy.
<b>Information Transfer</b>	Students can compare and contrast other objects, people, or places using the terms similar and different 100% of the time.	Students can compare and contrast other objects, people, or places using the terms similar and different 90-99% of the time.	Students can compare and contrast other objects, people, or places using the terms similar and different 75-89% of the time.	Students can only compare and contrast other objects, people, or places using the terms similar and different less than 75% of the time.

Rubric 4

## Understanding Resources

In connection with Worksheet 4: final question assessment

CATEGORY	4	3	2	1
What comes from our place.	Student shows complete understanding of a local resource and how it is collected.	Students show general understanding of how a local resource is collected. He/she is missing a key element of the process.	Student chooses a resources that is not local, but understands the collection process.	Student does not chose a local resources, and does not grasp the collection process.

Created at rubistar.4teachers.org

Rubric 5

**Class Discussion**

Can be used throughout the unit to assess class discussions.

CATEGORY	4	3	2	1
<b>Contributions</b>	Routinely provides useful ideas when participating in the group and in classroom discussion. A definite leader who contributes a lot of effort.	Usually provides useful ideas when participating in the group and in classroom discussion. A strong group member who tries hard!	Sometimes provides useful ideas when participating in the group and in classroom discussion. A satisfactory group member who does what is required.	Rarely provides useful ideas when participating in the group and in classroom discussion. May refuse to participate.
<b>Preparedness</b>	Student is prepared for the discussion and has obviously put some thought into their contributions.	Student is prepared for the discussion and has obviously put some thought into their contributions, however parts of their contribution may not be relevant.	Student is not prepared for the discussion, but is able to thoughtfully contribute eventually.	Student is not prepared and is unable to contribute to the topic.

Created at rubistar.4teachers.org



## Teamwork

Intended for use in *Fitness Fun* module.

CATEGORY	4	3	2	1
<b>Working with Others</b>	Almost always listens to, shares with, and supports the efforts of others. Tries to keep people working well together.	Usually listens to, shares with, and supports the efforts of others. Does not cause turmoil in the group.	Often listens to, shares with, and supports the efforts of others, but sometimes is not a good team member.	Rarely listens to, shares with, and supports the efforts of others. Often is not a good team player.
<b>Problem Solving</b>	Actively looks for and suggests solutions to problems for themselves and other students.	Actively looks for and suggests solutions to problems for themselves OR other students.	Does not suggest or refine solutions, but is willing to try out solutions suggested by others.	Does not try to solve problems or help others solve problems.
<b>Focus on the task</b>	Consistently stays focused on the task and what needs to be done. Very self-directed.	Focuses on the task and what needs to be done most of the time. Other group members can count on this person.	Focuses on the task and what needs to be done some of the time. Other group members must sometimes nag, prod, and remind to keep this person on-task.	Rarely focuses on the task and what needs to be done. Lets others do the work.
<b>Pride</b>	Work reflects this student's best efforts.	Work reflects a strong effort from this student.	Work reflects some effort from this student.	Work reflects very little effort on the part of this student.
<b>Kindness</b>	Student is kind and helpful to their peers. There is no negative talk to self or others.	Student is kind and helpful to their peers, but occasionally engages in negativity toward own abilities.	Student is satisfied with themselves, but occasionally has a tendency to be unkind to peer's abilities.	Student engages in consistent negativity with themselves and/or their peers.

Rubric 7

### Map Interpretation

To be used in *School Study* module

CATEGORY	4	3	2	1
Ability to Interpret	Student can fully answer questions about how they used the map. They include vocabulary such as cardinal directions in their explanation.	Student can fully answer questions about how they used their map. However the vocabulary portion is absent.	Student struggles to answer questions about how they used their map. AND/OR They use incorrect vocabulary.	Student is unable to answer questions about how they used their map.

Created at [rubistar.4teachers.org](http://rubistar.4teachers.org)

## Appendix B

# **Iditarod**

## **Grades 3rd, 4th, 5th**

**In a multiage setting, third, fourth, and fifth grade students will engage in a place-based, project based unit with an emphasis on physical activity through exploring the Iditarod.**

**The purpose is for students to explore their state through a rigorous focus on the Iditarod.**

**While this unit is developed with project-based learning and has a focus on physical activity, it is mostly rooted in place-based education. David Sobel (2004) explains, “Place-based education takes us back to basics, but in a broader and more inclusive fashion... The history, folk culture, social problems, economics, and aesthetics of the community and its environment are all on the agenda.” (p. 13).**

**Created by Kristine Rosevear  
for Discovery Peak Charter School Initiative**

## **Iditarod Unit Resource Guide Grades 3-5**

*Extra spaces are intentionally left to allow for teacher's personal notes and additions.*

### **Modules of Iditarod Unit:**

Taught Sequentially

Journaling - Following the Race

Graphing the Weather

Salt Dough Maps

Make it to Nome \*\*\* This lesson should be started early in the quarter and revisited throughout.

Dog Beds

### **Suggested Community Visits and Field Trips:**

- Attend the Iditarod Restart if it is in Fairbanks
- Interior Freight Dog Association will come to you and give demonstrations and discuss dog safety.
- Students will visit a local dog musher and participate in interviews and sled dog rides.
- Make donations for the animal shelters.

- <https://itcteacheronthetrail.com/>
- <http://iditarod.com/teachers/>
- [http://teacher.scholastic.com/activities/iditarod/historic/index.asp?article=historic\\_iditarod](http://teacher.scholastic.com/activities/iditarod/historic/index.asp?article=historic_iditarod)
- <http://www.commoncoresheets.com/> (for graphing worksheets)

*These books are suggestions for read alouds to go along with the unit. There is extra room for teachers to add additional resources.*

[illegible]

## Physical Activity Resources

*Alaska states students in grades K-8 must be provided opportunity for 54 minutes of physical activity per school day, this is 90% of the recommended 60 minutes per day (dhss.alaska.gov).*

Depending on the research you find, studies are showing students should not sit longer than 10 - 30 minutes. While physical activity is built into this unit, please utilize some of these quick physical activities if you find the students sitting for long periods of time.

### Online Resources and Apps:

- Brain Gym
- Gonoodle
- BrainBreak
- Lazy Monster

### Print Resources:

- *Making the Brain/Body Connection: A playful guide to Releasing Mental, Physical and Emotional Blocks to Success* by: Sharon Promislow
- *Smart Moves: Why Learning is Not All in Your Head* by: Carla Hannaford
- *Refocus and Recharge! 50 Brain Breaks for Middle Schoolers* by: Responsive Classroom
- *Brain Breaks for the Classroom: Help Students Reduce Stress, Reenergize & Refocus* by: Michelle Gay

### Ongoing Unit Assessment:

- Students will be creating a daily log journal of based on their musher's travel experiences.
- Revisit KWL chart to add learned information.
- Continued discourse on student learning and instructional methods with 3, 4, 5 teachers.
- Students will track heart rates.

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## Iditarod

### Module: Journaling - Following the Race

***Students will follow their favorite dog team as they run the Iditarod. As their team enters each checkpoint (or daily, depending on teacher's discretion) they will write from the point of view of the musher from that team.***

### FNSBSD Curriculum/Alaska State Standards:

#### *Social Studies Standards:*

- Identifying characteristics of Alaska using resources such as landmarks, models, maps, photographs, atlases, Internet, video, reference materials, GIS and mental mapping. (EQ.3.1-2, 6-7; GY.B.3-4, 8)
- Locating the physical and political regions of Alaska (e.g., Interior, South Central, North Slope). (EQ.3.1-2, 5-7; CS.B.1; CS.E.1)
- Locating selected cities and states of historical and current importance using absolute and relative location (e.g., Anchorage, Juneau, Barrow). (EQ.3.1-2, 7; CS.B.1; CS.E.1, 4-5, 7)

#### *3rd Grade Writing:*

- [3] 1.1.1 Writing complete sentences with a subject and a predicate
- [3] 1.1.2 Writing a paragraph on a single topic with two or more supporting details
- [3] 1.2.2 Using expressive language when responding to literature or producing text (e.g., journals, pictures supported by text or poetry) (L)
- [3] 1.3.2 Identifying and/or correcting mistakes in spelling (e.g., grade- appropriate, high- frequency words) (L)
- [3] 1.3.3 Identifying and/or correcting mistakes in punctuation at the end of sentences and capitalization (i.e., beginning of sentences and proper nouns)
- [3] 1.4.1 Rearranging and/or adding supporting details to improve clarity

#### *4th Grade Writing:*

- [4] 2.2.2 Writing in a variety of nonfiction forms using appropriate information and structure (i.e., personal letters, recounts, descriptions or observations)
- [4] 2.3.3 Identifying and/or correcting mistakes in: punctuation (i.e., end of sentences, commas in dates, salutations and closings in letters, and commas in series) and capitalization (i.e., book titles, beginning of sentences, and proper nouns)
- [4] 2.3.4 Identifying and/or correcting usage mistakes in subject/verb agreement (L)
- [4] 2.3.2 Identifying and /or correcting mistakes in spelling (e.g., grade- appropriate, high frequency words and contractions) (L)
- [4] 2.6.2 Using a thesaurus to find synonyms for common words (L)

#### *5th Grade Writing:*

- [5] 2.2.1 Writing an understandable story that incorporates setting, character, and basic plot
- [5] 2.1.1 Writing more than one paragraph stating and maintaining a focused idea and including details that support the main idea of each paragraph
- [5] 2.4.1 Rearranging and/or adding details to improve focus, to support main ideas, to clarify topic sentence, and to make sequence clear
- [5] 2.4.2 Giving/receiving appropriate feedback and using established criteria to review own and others' written work (e.g., peer conferences, checklists, scoring guides, or rubrics)\*(L)
- [5] 2.3.3 Identifying and/or correcting mistakes in punctuation (e.g., quotation marks for dialogue, commas in dates, salutations, and closings in letters, and commas in a series) and capitalization\*

Module: Journaling - Following the Race	
Learning Objectives	Assessment F=formative, S=Summative
Students will explore and build the knowledge of the Iditarod.	KWL chart (F)
Students will keep a journal to show understanding of grade-level writing targets.	Worksheets 1-5: Student checklists and guiding information. (F)
Students will publish a piece of point-of-view writing.	Rubric 1: Published Writing (S)

### Materials and Resources:

- Alaskan paper maps (one for each pair of children)
  - *Alaska Gazetteer* is preferable
- Computers with internet access
  - Used for tracking mushers and exploring online maps
- Composition Notebooks (one per child)
- Worksheets 1-5
- Rubric 1

### Procedure:

#### *Lesson 1: What is the Iditarod*

- Create a KWL chart about the Iditarod sled dog race with students to introduce the idea and do a depth check for understanding.
- Distribute technology and have students explore the website <http://iditarod.com/edu/category/race-resources/>
  - They will find information on mushers, dog care, maps, GPS trackers, checkpoints and more.
- Explain to the students that they will be choosing a musher to follow on the trail. They will be learning about different aspects of the communities they travel through including climate, landmarks, distances, and other aspects.
- Utilize the W section of the KWL chart to guide journal prompts and informational questions.

#### *Lesson 2: Writing Expectations*

- Prior to this lesson the teacher must meet with grade level teachers to determine each student as a basic, proficient, or distinguished writer. Understand that students may move through these groups as the quarter progresses.
- Allow students to explore musher profiles on the iditarod.com website. When they choose a musher they would like to follow have them write their name and the musher's name on the board.



- Students who may require extra assistance can be encouraged to pair up with a partner and share a musher.
- After everyone has chosen a musher distribute journals and allow students to decorate them with any type of flair they think their musher might enjoy.
  - Students will be required to number each page in their journal when they are done decorating.
- While students are decorating call up each level group and explain how they will be using their journals.
- For basic writers explain they will be writing a narrative from the point of view of their musher.
  - Review what a narrative is.
  - Discuss complete sentences and how to stretch sentences to add detail and paragraphing.
  - Distribute their rubric and have them cut and paste it into the back of their journal for reference. (Worksheets 1)
- For proficient writers explain they will be writing letters from the point of view of their musher.
  - Discuss what good letter writing looks like.
  - Distribute a sample letter and letter writing rubric for students to cut and paste into the back of their journals for reference. (Worksheets 2&3)
- For distinguished writers explain they will be writing a story with their musher and dogs as characters. Each day they will write a new creative adventure about their team, or continue the story from a previous day.
  - Review character, plot and setting.
  - Discuss writing focused paragraphs and remind them this is a rough draft and is not required to be perfect.
  - Distribute the paragraph writing and story elements rubrics for students to cut and paste into the back of their journals. (Worksheet 4&5)

### *Lesson 3: Essential Questions and Writing Prompts*

- Introduce the essential questions students will have to answer daily. Make sure they are displayed in the classroom for students to refer to.
  - Where is your team?
  - What is the weather like in your team's current area?
    - Include precipitation, temperature and wind speed.
  - What does the surrounding terrain look like? What are some landmarks they might be using to navigate?
  - What physical region of Alaska is your musher currently in?
- Define precipitation, temperature, wind speed, terrain, landmarks, and navigate.
- Discuss how landmarks are helpful to navigate areas and how maps are used on a trail to keep someone on course.
- Model how this information can be found on the iditarod.com website and how it should be reported each day in their journal. Tell them that these are their notes; they must be legible and understandable to the person taking them. (Worksheet 6)
- Have students track their musher and report their first set of data.

- When finished, students will be given 15-20 minutes to journal focusing on the standards introduced in Lesson 2.

*Optional Additional Research Questions to Aide Writing:*

- Where is your musher in relation to *(Insert Town Name)*?
- Can you find a fact that explains why this place is historically significant?
- How far did your musher travel since yesterday? Can you figure out how fast they were going?
- What is the weather like in this area at different times in the year?
- Compare this place's weather conditions to that of another town your musher has already traveled through.

*Optional Writing Prompts:*

- Would you live in this town/village?
- What do you think kids might do for fun in this place?
- What time of year would you be most interested in visiting this town/village?
- What are some of the similarities and differences between here and this town/village?
- How would you get supplies you need if you ran out while in this town/village?
- What if your sled broke? What are some struggles you would encounter and how would you handle them?
- Take a break from sentences. Create a diagram of a dog sled.

*Continues Daily:*

- Daily, students will track their musher, answer their essential questions, record their data, and write in their journal.
- When students start to get into this routine the whole process should take about 20 to 25 minutes per day, allowing for 15-20 minutes of journal writing time.
- Be sure to check in with students about questions they have regarding their daily essential questions and facilitate discussions as common questions arise.

*Lesson 4: Post Iditarod Finish:*

- Students will choose one journal entry to bring through the writing process to publication.
- Distribute published writing rubric. (See Appendix G)
- Students will revise, edit, and publish their writing.
  - These process will be established and practiced during other lessons throughout the day. Students will have a grasp on how to do each of these steps and the teacher will simply be a guide and reference tool at this point.
- Author's chair will be available for students who choose to share their work.
- Complete the KWL chart started at the beginning of the lesson.

## Iditarod

### Module: Graphing the Weather

*Students will graph the weather changes of different Iditarod checkpoints.*

### FNSBSD Curriculum/Alaska State Standards:

*Social Studies Standards:*

- Identifying characteristics of Alaska using resources such as landmarks, models, maps, photographs, atlases, Internet, video, reference materials, GIS and mental mapping. (EQ.3.1-2, 6-7; GY.B.3-4, 8)
- Locating the physical and political regions of Alaska (e.g., Interior, South Central, North Slope). (EQ.3.1-2, 5-7; CS.B.1; CS.E.1)

*3rd Grade Math:*

- (3.MD.5) Measure and record lengths using rulers marked with halves and fourths of an inch. Make a line plot with the data, where the horizontal scale is marked off in appropriate units-- whole numbers, halves, or quarters.
- (3.MD.4) Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one: and two: step "how many more" and "how many less" problems using information presented in scaled bar graphs.
- (3.MD.6) Explain the classification of data from real-world problems shown in graphical representations. Use the terms minimum and maximum.

*4th Grade Math:*

- (4.MD.6) Explain the classification of data from real-world problems shown in graphical representations including the use of terms range and mode with a given set of data.

Module: Graphing the Weather	
Learning Objectives	Assessment F=formative, S=Summative
Students will explore and create bar, pie, and line graphs utilizing the weather patterns of Alaskan towns and villages.	Rubric 2: Graphing (S)
Third grade students will identify the minimum and maximum in their set of data.	Worksheets 7-9
Fourth graders will identify the range and mode of their data set.	Worksheets 7-9

**Materials and Resources:**

- Journals from *Following the Race*
- Large chart paper
- Assorted writing tools for creating vibrant charts
- Computers with access to Microsoft Excel
- Assorted charts and graphs to introduce types
  - Excellent examples as well as some of poor quality.
- Pie, bar, and line graph worksheets (use [commoncoresheets.com](http://commoncoresheets.com))
- Worksheets 7-9

**Procedure:***Lesson 1: Graph Exposure*

- Discuss and expose children to different types of charts and graphs including; line, bar, and pie
- Show examples of each and explore the types of information each graph displays.
- Allow children time to complete the worksheets chosen from [commoncoresheets.com](http://commoncoresheets.com), or other teacher selected worksheets for exposure and refresh for graphs.
- Lead a discussion with the students about the best ways to display data. They should come up with something similar to below:
  - Temperature change as mushers passed through each checkpoint (line)
  - How many mushers were in each region on different dates (pie)
  - How many days it took each musher to complete the Iditarod trail (bar)

*Lesson 2: Bar Graphs*

- Split students into groups of 3-4 (at least one from each grade level).
- Have 5th grade students gather the data for the bar graph (stated in day 1) off of the Iditarod website. They can search this on their own and use their research skills to complete the task.
  - They should arrange this information into a table ready for their classmates.
- 3rd graders can gather materials.
  - Chart paper, rulers, markers, pencils
- 4th graders will determine what to label the x and y axis of the graph.
- Together students can begin to build the graph using rulers and pencils.
- The teacher should approve each groups graph before allowing them to use markers to trace their lines.
- Students work together to fill in their bar graph information
- Students can present this info to the class and compare their graphs at the end of class.
  - 3rd graders will present the minimum and maximum of their data.
  - 4th graders will present the range and mode of their data.
- During presentation ask each student questions to interpret data. Samples:
  - How many more/less days did it take musher A to complete the distance than musher B?
  - Which musher took the least/most amount of days to complete the trail?
  - Assess with Rubric 2.

*Lesson 3: Pie Graphs*

- Use same student groups as Lesson 1.
- Assign each group a date during the Iditarod (do some prior research to ensure the graphs will look different).
- 3rd graders search to find the different regions of Alaska. This should already be established through the journaling lesson.
- 4th graders will look up each musher and which checkpoint they were closest to on the date assigned to their group.
- 5th graders will watch the YouTube video on the link <https://www.youtube.com/watch?v=FVRJU--8YMY> to find out how to create a pie chart through Microsoft Excel.
  - I would suggest creating this website as a link on your class website.
- After the information is gathered students will use the maps the 3rd graders acquired and the musher info the 4th graders acquired to determine the region each musher was a part of on the date assigned.
- 5th graders will then take their knowledge of how to use excel and create a graph to assist the younger students on how to create the graph.
- Students can present this info to the class and compare their graphs at the end of class.
  - 3rd graders will present the minimum and maximum of their data.
  - 4th graders will present the range and mode of their data.
- During presentation ask each student questions to interpret data. Samples:
  - Which region had the most/least mushers on the day your graph was made for?
  - What percentage of mushers did the Southcentral region have on your day?
  - How many mushers were in the central region on your day?
  - Assess with Rubric 2.

#### *Lesson 4: Line Graphs*

- Use same student groups at Lesson 2.
- Each group will be assigned different Iditarod checkpoints to create line graphs based on how the temperature changed as each musher passed through.
- Determine as a class what the X and Y axis should be labeled (mushers name & temperature, title should be the checkpoint assigned).
- Create a chart in excel with mushers names and assigned checkpoints. Students assigned to each musher will enter the temperature for each of the checkpoints. If they do not have the information for a checkpoint, they will need to look it up on the Iditarod website.
  - Teacher discretion: This can be done as a group or it can be a shared document to work on individually.
- The group will discuss and determine if they would like to create their graph through excel, or to use chart paper and markers.
- Using the information on the class chart students create their desired line graphs.
- Students can present this info to the class and compare their graphs at the end of class.
  - 3rd graders will present the minimum and maximum of their data.
  - 4th graders will present the range and mode of their data.
- During presentation ask each student questions to interpret data. Samples:
  - What was the coldest/warmest place your musher checked into?

- What was the temperature at checkpoint A when your musher go there?
- Assess with Rubric 2.

## Iditarod

### Module: Salt Dough Maps

***Students will explore the different regions of Alaska and their major landmarks, including important towns and villages.***

### **FNSBSD Curriculum/Alaska State Standards:**

#### *Social Studies Standards:*

- Identifying characteristics of Alaska using resources such as landmarks, models, maps, photographs, atlases, Internet, video, reference materials, GIS and mental mapping. (EQ.3.1-2, 6-7; GY.B.3-4, 8)
- Locating the physical and political regions of Alaska (e.g., Interior, South Central, North Slope). (EQ.3.1-2, 5-7; CS.B.1; CS.E.1)
- Locating selected cities and states of historical and current importance using absolute and relative location (e.g., Anchorage, Juneau, Barrow). (EQ.3.1-2, 7; CS.B.1; CS.E.1, 4-5, 7)

#### *3rd Grade Language Arts:*

- [3] 1.6.1 Completing a simple (1- 2 step) task by following written directions (L)
- [3] 1.6.2 Identifying the sequence of steps in simple directions

#### *4th Grade Language Arts:*

- [4] 2.6.1 Completing a simple task by following written, multi- step directions (e.g., recipe)

#### *5th Grade Language Arts:*

- [5] 2.6.1 Completing a task by following written, multi- step directions (e.g., origami) (L)
- [5] 2.6.2 Identifying the sequence of steps in multi- step directions\*

#### *3rd Grade Math:*

- (3.NF.1) Understand a fraction  $1/b$  (e.g.,  $1/4$ ) as the quantity formed by 1 part when a whole is partitioned into  $b$  (e.g., 4) equal parts; understand a fraction  $a/b$  (e.g.,  $2/4$ ) as the quantity formed by  $a$  (e.g., 2) parts of size  $1/b$  (e.g.,  $1/4$ ).

#### *4th Grade Math:*

- (4.NF.1) Explain why a fraction  $a/b$  is equivalent to a fraction  $(n \times a)/(n \times b)$  by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.
- (4.NF.3) Understand a fraction  $a/b$  with  $a > 1$  as a sum of fractions  $1/b$ .
  - Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.

#### *5th Grade Math:*

- (5.NF.2) Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators (e.g., by using visual fraction models or equations to represent the problem). Use benchmark fractions and number sense of fractions to estimate mentally and check the reasonableness of answers.

Module: Salt Dough Maps	
Learning Objectives	Assessment F=formative, S=Summative
Students will follow written multi-step directions.	Worksheet: 10: Salt Dough Recipe (S)
Students will utilize grade level knowledge of fractions.	Exit Slip (Lesson 4) (F)
Students will identify characteristics of Alaska utilizing various resources.	Worksheet 11: Mapping Checklist (F)
Students will locate physical regions of Alaska.	Worksheet 11: Mapping Checklist (F) Rubric 3: Creating a Map (S)
Students will locate select towns and villages of historical and current importance.	<i>Would I live Here?</i> Journal Entry (Lesson 3) Rubric 4: Using Evidence (S)

### Materials and Resources:

- Access to physical maps of Alaska with the regions listed above
- Large outline of Alaska (2 per student)
- Worksheets 10 & 11
- Bowls, measuring cups, and spoons for salt dough
- 5 food colorings to represent each region
- Toothpick flags

### Procedure:

#### *Lesson 1: Maps & Regions*

- Have students explore the maps of Alaska regions. Be sure to discuss how there are different types of regions as well.
- Have students identify different mountain ranges, rivers, and towns they are now familiar with.
- Show students the checklist they will be using to complete their maps (Worksheet 11)
- Discuss that making maps requires neatness and accuracy. Sloppy maps are difficult to read.
- Explain the next few days of the project so they will understand the process. They need to understand they will be making two maps.

#### *Lesson 2: Creating Maps (will take multiple days)*

- Students can work together today, within their table groups.
- Discuss and model different ways to create a label maps (review from yesterday).
  - This can be done at teacher's discretion, but follow basic mapping skills. Example) a black dot represents a town.
  - Keep it consistent and be clear with expectations. This is not an excellent place for creativity; now is the time for neatness and accuracy.



- Allow students to start labeling their first map IN PENCIL, color will come when it is complete. Model where the major rivers go and explain that most of the important towns are close to these rivers.
- After the rivers are labeled, allow the kids to work in their groups and complete the rest of their maps. This will take multiple days.
- Circulate and offer assistance and redirect as necessary.
  - This is a very “independent” work situation, especially for third graders, remaining on task may be difficult.
- Once they feel they are complete, do a quick check of the map and make suggestions.
- Students may now add color to their maps. Remind them the color should not distract from their information, but should add to the clarity of the map.
- Have students the Iditarod trail over the map. Remind them the trail MUST GO THROUGH THE CHECKPOINTS!

### *Lesson 3: Would I Live Here?*

- Assign each pair of students a town from their checklist. Have students answer the following questions about the town:
  - What does the terrain look like? Are there any special landmarks?
  - How does the terrain effect the weather? Is there anything to block the wind?
  - What are the average temperatures and precipitation this time of year?
  - How do you get your needs met in this place? (Think food, water, shelter)
  - What is this place’s historical significance?
- Tell students they can answer these questions in their journals by taking notes.
- Have students utilize the answers to these questions, plus other interesting information you found to create their own (moving away from group work for this) journal entry answering:
  - What parts of this community would I enjoy?
  - What parts of this community would be difficult for me?
  - Would I like to live here? Why?
- These journal entries can be brought to publication if time allows. Assess with Rubric 4 for knowledge of area and Rubric 1 for writing.

### *Lesson 4: Make Salt Dough*

- Distribute the salt dough recipe.
- Break students into 5 groups (you will need five colors for the five regions).
- Set out the ingredients and tools needed at a common space in the room.
- Read the entire recipe as a class and discuss why it is important to read the whole recipe before beginning.
- Ask 3rd graders to collect the mixing tools needed.
  - Spoon & Bowl
- Ask 4th graders to collect the measuring tools needed.
  - ¼ cup measure and ½ cup measure (ask them to figure this out on their own)
- 5th graders will be responsible for reading the recipe and checking for accuracy.
- 4th graders will be responsible for retrieving ingredients.
  - They will bring the ingredient back to their work space and measure it in front of the group to ensure accuracy. They will have to use their smaller measuring cups

to add up to the correct amount. This may need to be modeled in front of the class depending on the group of students.

- 3rd graders will be responsible for mixing.
- The exit slip for the group will be number sentences written to show how each group added their fractions together to create the correct amount for the recipe.
- Each group will need to mix a color into their dough to represent a region (Southeast group may need to donate some plain dough to Interior because of the size difference in the two regions).

#### *Lesson 5: Make Salt Dough Maps*

- *Leave yourself lots of time for this lesson. It is time sensitive and cannot be completely fully if the dough dries too quickly.*
- Model the process as it goes.
- Start with the Interior region. Discuss with the class the borders of the region and which town and landmarks will need to be within it. Stick the dough down.
- Continue this with each of the regions. It will need to be done somewhat quickly so the dough does not dry completely.
- Be sure to include mountain ranges and volcanoes as you come across them and build them with the dough.
  - This is the perfect time to begin discussion of the Pacific Rim and the Ring of Fire.
- Depending on time and materials you can label towns with flagged toothpicks, and draw rivers into the dough with a pencil tip to create a divot. The Iditarod trail can be marked with a dotted line.
- If everything dries too quickly (this will depend on the consistency the dough turns out as) the maps can dry completely and these things can be labeled with felt tip markers of appropriate colors.

## Iditarod Module: Make it to Nome

\*\*\*This lesson should be started early in the quarter as soon as kids have explored map scales and identified the Iditarod trail. It is meant as a daily activity.

***Students will build stamina in running by running 1,000 laps throughout the quarter.***

### FNSBSD Curriculum/Alaska State Standards:

#### *Social Studies Standards:*

- Identifying characteristics of Alaska using resources such as landmarks, models, maps, photographs, atlases, Internet, video, reference materials, GIS and mental mapping. (EQ.3.1-2, 6-7; GY.B.3-4, 8)
- Locating the physical and political regions of Alaska (e.g., Interior, South Central, North Slope). (EQ.3.1-2, 5-7; CS.B.1; CS.E.1)
- Locating selected cities and states of historical and current importance using absolute and relative location (e.g., Anchorage, Juneau, Barrow). (EQ.3.1-2, 7; CS.B.1; CS.E.1, 4-5, 7)

#### *Physical Education Standards:*

- S4.E1.4: Exhibits responsible behavior in independent and group situations.
- S4.E1.5: Engages in physical activity with responsible interpersonal behavior (e.g. peer to peer, student to teacher, student to referee).
- S3.E3.4: Evaluate heart rate during exercise utilizing methods such as manual pulse checking, perceived exertion index or heart rate monitors.

Module: Make it to Nome	
Learning Objectives	Assessment F=formative, S=Summative
Students will monitor heart rate using manual pulse checking.	Worksheet 12 (S)
Students will engage in responsible interpersonal behavior by being mindful of differences between themselves and other students.	Rubric 5: Physical Activity; Interpersonal Behavior (F, S) Assess regularly to track improvements.

**Materials and Resources:**

- Feet with appropriate running shoes
- A gymnasium or other area to run laps (possibly around a school building interior or exterior)
- Clicker
- <http://www.nscsd.org/>

**Procedure:***Lesson 1: Map Scale and Laps*

- Explain to students that they will be running daily (or almost daily) in this class. Their goal will be to run 1,000 laps since the Iditarod is 1,000 miles long.
- Show students a map and point out the scale. Assure kids that they will not be running 1,000 miles, but that each lap will represent a mile.
- Lead a class discussion on stamina and why it is important. Key Points:
  - A worked muscle gets stronger.
  - Our heart is a muscle that must be exercised.
  - As you run longer each day your muscles and heart get stronger and will help keep your body healthier.
  - Pacing is important in running; sprinting and stopping is not what we are going for.
- Take the students to the gym and explain that their laps will only count if they run the whole way.
- Have students check their heart rate (this is something they will be familiar with at this point). Tell them to keep the number in their brains as much as possible.
- Set the clock for 2 minutes and have students begin running the whole time. Use a clicker to keep track of each student who passes the starting point.
- Encourage students to keep running at a lowered pace to ensure they can run the entire two minutes.
- After running, have students check their heart rate again and discuss increases.
- Explain to students they will be increasing their running time by 30 seconds each day. If the majority of the class is struggling to keep going, they can stay at a time for several days until they build their stamina.

*Lesson 2: Heart Rate Zones*

- Introduce students to heart rates zones and their meanings. Information on this can be found at <http://www.nscsd.org/>.
- Have students determine what their heart rate should be after a short run (formulas will be provided from website).
- Students will record their current heart rate, goal rate, and actual rate after each run in their journals.

*Lesson 3: Charting*

- Run for 2 minutes and 30 seconds. Have kids assess themselves to see if they should keep that time or if they are ready for an increase. Make a decision as a group.
- Ask the students to come up with a way to chart their progress.

- Options could be: coloring in along a map of the Iditarod trail, using tally marks, coloring in a pie chart, or other ideas the kids may have.
- Select and create the chart as a class and chart the “miles” completed.
- Important components:
  - Increments of accomplishment
  - Checkpoints
  - Contrasting colors

### *Lesson 3: Goal Setting*

- Run and chart progress.
- Have a class discussion about goal setting. Challenge the kids to keep up with the mushing dogs and make it to checkpoints as the mushers do. This will give them a reason to encourage each other and try their best.
- Have struggling students choose a student who they would like to pace with. This will encourage spring/walkers to learn pacing.

### *Continuous*

- This lesson will continue daily.
- Run
- Check heart rates before and after each run session and record.
- After each day of running, have students determine if they should increase their time or stay the same.
- Chart progress and discuss checkpoints as they come.
- Determine if goals are met and which mushers the runners are keeping up with.
- Keep your running shoes ready. Set a good example and run with students as much as possible. There is usually an extra human able to count laps for the small amount of time. Students with injuries will be the daily clicker.

## Iditarod Dog Service

*Students will utilize basic geometry concepts to make dog blankets for local shelters.*

### FNSBSD Curriculum/Alaska State Standards:

*3rd Grade Math:*

- (3.G.1) Categorize shapes by different attribute classifications and recognize that shared attributes can define a larger category. Generalize to create examples or nonexamples.
- (3.G.2) Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.

*4th Grade Math:*

- (4.G.3) Recognize a line of symmetry for a two-dimensional (plane) figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line; symmetric figures and draw lines of symmetry.

*5th Grade Math:*

- (5.G.2) Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.
- (5.G.3) Understand that attributes belonging to a category of two-dimensional (plane) figures also belong to all subcategories of that category.
- (5.G.4) Classify two-dimensional (plane) figures in a hierarchy based on attributes and properties.

Module: Dog Service	
Learning Objectives	Assessment F=formative, S=Summative
Students will make dog blankets while exploring properties of geometry.	Rubric 6: Geometry and Patterning (S)

## Materials and Resources:

- Get in contact with local quilting groups for the following:
  - At least 2 sewing machines
  - Various threads
  - Fleece fabric
  - Many of these items can also be acquired through donation from families and community members.
- *Designing Patterns: Exploring Shapes and Area* by, Watt et al.
- Pattern Options (These can be chosen and created by volunteers.)

## Procedure:

### *Lesson 1: Finding an Animal Shelter*

- Explain to students they will be exploring geometry concepts during the next few lessons. They will be doing this by making blankets for dogs who need some extra love.
- Students will need to find animal shelters who would like to receive gifts of homemade dog toys and blankets.
- Ask students how they might find this information.
- They should come up with the idea of an internet search and asking friends and family.
- Acquire the phone numbers of these shelters.
- Have students break into groups (one group per shelter found) and write a script to read as they call and ask if these places would like donations. The script should include:
  - Who are we?
  - What are we doing?
  - When do we plan to be done?
  - Would it be ok for us to bring the items in as a class, or would they rather have adults come for a quick drop off?
- Select one student per group to call their shelter and offer our future makings.

### *Lesson 2: Exploring Shapes and Area*

- Determine where students are with basic geometry concepts and choose two lessons from *Designing Patterns: Exploring Shapes and Area* by, Watt et al. to teach about patterning. This could take up to 4 days depending on the lessons chosen.
- These lessons will prepare the students for creating quilting squares to complete a small blanket.

### *Lesson 3: Pattern Choice & Cutting*

- Have students choose one of the pattern options available. Tell them to choose wisely and challenge themselves as much as they feel comfortable.
- Utilize quilting volunteers to create groups. Each volunteer can be in charge of a pattern group.
- Students will need to determine how many colors they will need to create their patterns and select their fabrics.
- Each group leader will work students through the process of cutting out the parts to their pattern and laying out the material to check their work.

*Lesson 4: The Sewing...*

- Depending on the comfort of the sewing machine owners, students may be allowed to sew. However, more likely students will piece together their work and sit with a seamstress to watch the squares grow into their artwork.
- Students will have the option to get with groups of children and trade quilt squares to create a multicolored blanket top.
- The squares can be set out together to display the patterns and then sewn together to complete the blankets.
  - Students will need to create a stacking system to ensure their blankets will be sewing together properly. This can be determined by the students or the group leader can share their tips and tricks to ensure accuracy.
- The finished product will be just the top of a blanket. They will look unfinished but will be used for dog snuggle toys.

*Early Finishers and Patient Waiters:*

- Pose the problem to the children: We have all these scraps. How can they be used to aide in this project? What should we make with them so they don't turn into garbage?
- Have students work as a group to decide what to do with the extras. They can propose their ideas to their classmates and put the options to a vote.



## Reflection

I enjoyed creating the Iditarod unit the most. It is with the age group I am most familiar with, so I had experiences to draw from. It allowed me to utilize and develop past lessons to create a more holistic unit that fits into Discovery Peak's mission.

### *Anticipated Struggles*

There was some discussion about student slowdown being a struggle since these explorations are selected by choice. With other classes doing completely different projects, some may be more exciting than others to different students. Each of the explorations will have community involvement pieces where students will be going outside of the classroom. When other classes are doing their community involvement pieces, field trips, and projects it may be difficult to keep focus in class. Reminding students that they have exciting pieces coming soon will help. Also, having a curriculum map for students to see, so they know when their exciting bits are coming up, could be helpful.

I am a little concerned about the *Make it to Nome* lesson. It is one that has been taught in many different variations by educators I've spoken with. However, running in circles is not always something students find entertaining. Building stamina is not the most exciting part of physical activity. My hope is it will bring about an appreciation for the dogs and mushers as athletes, as well as an understanding of maps being a shortened representation of a large space.

The *Dog Service* lesson is based highly in volunteer support. One person cannot help students make quilt tops. There will need to be much forethought and footwork on the teacher end of this lesson to make it successful. Being that these lessons are designed for a charter school may help with this since parents will have signed a contract to be involved as volunteers. Also, my hope is the many social sewing groups in town would be willing to share their crafts.

These are some big hopes that I realize must come to fruition to successfully complete this portion of the unit.

Differentiation is also a struggle. These students are going to be pulled from three different classrooms. Therefore, it is up to the teacher to learn the student population quickly to be able to make accommodations for students. Some fourth graders may need to be practicing third grade skills, while some fourth graders should be pushed to explore fifth grade skills.

*Goals met:*

- Physical Activity:
  - *Make it to Nome*: Students will be running daily to build stamina.
  - Brain-break type activities will need to be implemented to make sure students are not seated for over an hour.
- Place-based:
  - *Journaling - Following the Race*: Students utilize Alaskan geography to research and draw inspiration for writing.
  - *Graphing the Weather*: Students use statewide weather patterns to create meaningful graphs to interpret.
  - *Salt Dough Maps*: Students map the state of Alaska, including local towns and landmarks.
  - *Make it to Nome*: Utilizing a local dog race, students learn pacing, graphing, and goal setting.
  - *Dog Service*: Students will be providing a service for local dog shelters.
- Project-based:
  - *Graphing the Weather*: Students create meaningful graphs with data from local areas. Students are also given the opportunity to show their level of learning through group presentations and oral assessments.
  - *Salt Dough Maps*: Students will make salt dough and three dimensional maps.
  - *Dog Service*: Through creating dog blankets, students will explore geometry.
  - *Journaling: Following the Race*: While all the lessons are created for multi-age students, this one has students focusing on the same topic and producing age appropriate, gradable writing products. This shows the use of differentiation and individualized instruction within the unit.

## **Worksheets**

- Worksheet 1: Paragraph Writing Basic
- Worksheet 2: Letter Writing
- Worksheet 3: Sample Letter
- Worksheet 4: Story Writing
- Worksheet 5: Paragraph Writing Distinguished
- Worksheet 6: Sample Journal
- Worksheet 7: Bar Graph Checklist
- Worksheet 8: Line Graph Checklist
- Worksheet 9: Pie Graph Checklist
- Worksheet 10: Salt Dough Recipe
- Worksheet 11: Alaska Map Checklist
- Worksheet 12: Heart Rate Tracking

4	3	2	1
Student wrote a paragraph with a topic sentence, two or more supporting details, and well-constructed sentences.	Student wrote a paragraph with a topic sentence but only one supporting detail OR sentences are not well constructed.	Student wrote a paragraph with two or more supporting details and well-constructed sentences, but did not include a topic sentence.	Student wrote a paragraph is missing two of the following: a topic sentence, two or more supporting details, poorly constructed sentences.

4	3	2	1
Student utilizes multiple facts found in their research to enhance their writing.	Student utilizes a single fact found in their research to enhance their writing	Student includes multiple facts, but it does not enhance their writing.	Student does not include facts in their writing.

[illegible]

## Letter Writing Checklist:

- \_\_\_/2 Greeting (capitalized)  
 \_\_\_/2 Comma after greeting  
 \_\_\_/2 Date (on right)  
 \_\_\_/2 Indent for paragraph(s)  
 \_\_\_/2 Complete Sentences  
 \_\_\_/2 Salutation (capitalized)  
 \_\_\_/2 Signature (in cursive)  
 \_\_\_/2 Neatness  
 \_\_\_/14 **TOTAL**

## Weekly Writing Checks:

Date	Grade (0-14)

[4] 2.2.2 Writing in a variety of nonfiction forms using appropriate information and structure (i.e., personal letters, recounts, descriptions or observations)

4	3	2	1
Student utilizes multiple facts found in their research to enhance their writing.	Student utilizes a single fact found in their research to enhance their writing	Student includes multiple facts, but it does not enhance their writing.	Student does not include facts in their writing.

## Sample Letter

March 27, 2017

Good Morning,

Thank you for writing a greeting with capital letters and following it up with a comma like you see above. Don't forget to indent your paragraph! Your letters should always be at least a few sentences long. Pay close attention to writing the date correctly. Double check all of your sentences are complete with proper sentence structure, including capitals and periods. I will be looking at how neat your handwriting is as well. Examples of salutations are; Sincerely, Thank you, Yours truly, Best wishes, and many more. Notice how the first letter of each is capitalized. Please remember to sign your name in cursive.

Sincerely,

Your Favorite Teacher

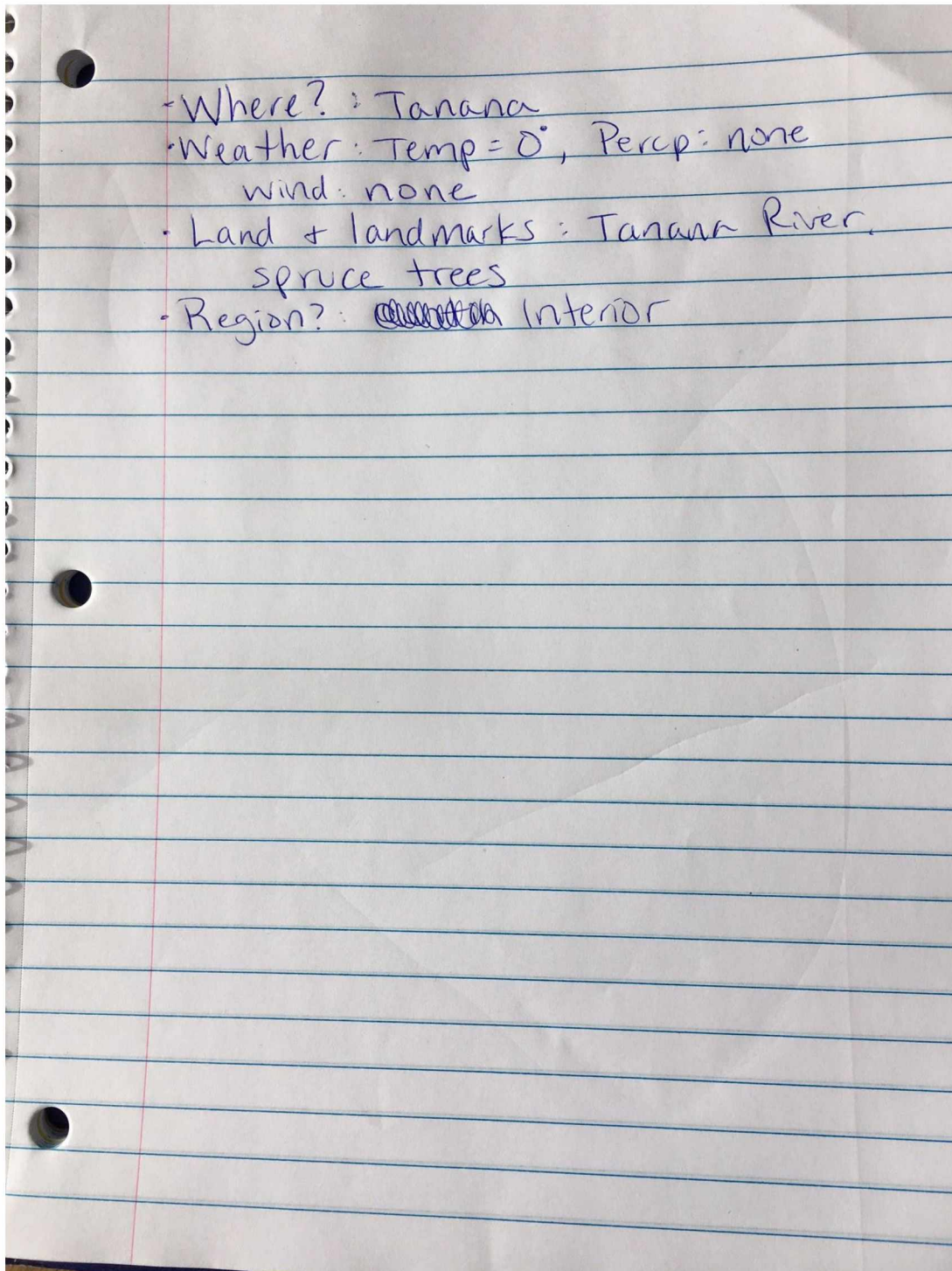
4	3	2	1
Student utilizes multiple facts found in their research to enhance their writing.	Student utilizes a single fact found in their research to enhance their writing	Student includes multiple facts, but it does not enhance their writing.	Student does not include facts in their writing.

[illegible]

[illegible]



### Sample Journal Page



**Bar Graph Checklist**

- \_\_\_\_\_ Title
- \_\_\_\_\_ Key
- \_\_\_\_\_ Interval
- \_\_\_\_\_ Y-axis
- \_\_\_\_\_ X-axis
- \_\_\_\_\_ Labels
- \_\_\_\_\_ Neatness

Report the following data. Be sure to include units.

Minimum: \_\_\_\_\_

Maximum: \_\_\_\_\_

Range: \_\_\_\_\_

Mode: \_\_\_\_\_

**Line Graph Checklist**

- \_\_\_\_\_ Title
- \_\_\_\_\_ Key
- \_\_\_\_\_ Interval
- \_\_\_\_\_ Y-axis
- \_\_\_\_\_ X-axis
- \_\_\_\_\_ Labels
- \_\_\_\_\_ Neatness

Report the following data. Be sure to include units.

Minimum: \_\_\_\_\_

Maximum: \_\_\_\_\_

Range: \_\_\_\_\_

Mode: \_\_\_\_\_

**Pie Graph Checklist**

- \_\_\_\_\_ Title
- \_\_\_\_\_ Key
- \_\_\_\_\_ Labels
- \_\_\_\_\_ Legible (make fonts and colors easy to read)
- \_\_\_\_\_ Excel Numbers Sheet

Report the following data. Be sure to include units.

Minimum: \_\_\_\_\_

Maximum: \_\_\_\_\_

Range: \_\_\_\_\_

Mode: \_\_\_\_\_

## Salt Dough Recipe

1 cup salt

2 cups flour

$\frac{3}{4}$  cup water

### Directions:

1. Highlight or cross out each step as it gets done to ensure accuracy.
2. Gather a bowl, spoon, measuring cups, and airtight container.
3. Double this recipe. That means to times it by 2.
4. Measure the salt and flour and mix the dry ingredients together.
5. Stir in the water slowly (little bits at a time).
6. The dough will begin to form a ball.
7. Knead the ball with your hands until it is smooth and evenly mixed.  
\*\*\*Hint: Don't stick your finger into it. Use the palms of your hands.
6. Add your groups designated color and knead until fully mixed.
7. Put the mixed product into an airtight container to be used for the next lesson.

## Alaska Map Checklist

Items with a “\*” are required. Other items are optional. Including 5 or more and keeping your map looking neat will result in extra credit.

### Bodies of Water

This should be traced in blue.

- \_\_\_\_\_ \*Yukon River
- \_\_\_\_\_ \*Kuskokwim River
- \_\_\_\_\_ \*Chena River
- \_\_\_\_\_ \*Tanana River
- \_\_\_\_\_ Bristol Bay
- \_\_\_\_\_ Chukchi Sea
- \_\_\_\_\_ Bering Strait

### Iditarod Checkpoints

Mark each of these with a circled dot.

- \_\_\_\_\_ \*Anchorage
- \_\_\_\_\_ Campbell Airstrip
- \_\_\_\_\_ \*Fairbanks
- \_\_\_\_\_ Nenana
- \_\_\_\_\_ \*Manley
- \_\_\_\_\_ Tanana
- \_\_\_\_\_ \* Ruby
- \_\_\_\_\_ \*Galena
- \_\_\_\_\_ Huslia
- \_\_\_\_\_ \*Koyukuk
- \_\_\_\_\_ Nulato
- \_\_\_\_\_ \*Kaltag
- \_\_\_\_\_ \*Unalakleet
- \_\_\_\_\_ Shaktoolik
- \_\_\_\_\_ \*Koyuk
- \_\_\_\_\_ Elim
- \_\_\_\_\_ \*White Mountain
- \_\_\_\_\_ Safety
- \_\_\_\_\_ \*Nome

### Landmarks

Your teacher will determine how each is represented and labeled.

- \_\_\_\_\_ \*Alaska Range
- \_\_\_\_\_ \*Kenai Peninsula
- \_\_\_\_\_ \*Brooks Range
- \_\_\_\_\_ Aleutian Islands
- \_\_\_\_\_ Seward Peninsula
- \_\_\_\_\_ Kodiak Island
- \_\_\_\_\_ Prince William Sound

### Other Historical Towns

Mark each with a dot. The capital with a ★

- \_\_\_\_\_ \*Valdez
- \_\_\_\_\_ \*Prudhoe Bay
- \_\_\_\_\_ \*Bethel
- \_\_\_\_\_ \*Barrow
- \_\_\_\_\_ \*Juneau
- \_\_\_\_\_ \*Sitka

### Shade Each Region by Color

(2pts each)

- \_\_\_\_\_ Southcentral (Blue)
- \_\_\_\_\_ Southeast (Green)
- \_\_\_\_\_ Interior (Yellow)
- \_\_\_\_\_ Arctic (Red)



## **Rubrics**

Rubric 1: Published Writing

Rubric 2: Graphs

Rubric 3: Mapping

Rubric 4: Using Evidence to Support Writing

Rubric 5: Physical Activity

Rubric 6: Geometry in Patterning



Rubric 1

**6 Trait Writing: Published Writing**

To be used for published writing within the unit.

CATEGORY	4	3	2	1
<b>Grammar &amp; Spelling (Conventions)</b>	Writer makes no errors in grammar or spelling that distract the reader from the content.	Writer makes 1-2 errors in grammar or spelling that distract the reader from the content.	Writer makes 3-4 errors in grammar or spelling that distract the reader from the content.	Writer makes more than 4 errors in grammar or spelling, distract the reading from the content.
<b>Capitalization &amp; Punctuation (Conventions)</b>	Writer makes no errors in capitalization or punctuation so the product is exceptionally easy to read.	Writer makes 1-2 errors in capitalization or punctuation, but the paper is still easy to read.	Writer makes a few errors in capitalization and/or punctuation that catch the reader's attention and interrupt the flow.	Writer makes a several errors in capitalization and/or punctuation that catch the reader's attention and greatly interrupt the flow.
<b>Penmanship (Conventions)</b>	Paper is neatly written or typed with no distracting factors.	Paper is neatly written or typed with 1-2 distracting factors (e.g., dark cross-outs, words written over, distracting font).	The writing is generally readable but the reader has to exert quite a bit of effort to figure out some of the words.	Many words are unreadable OR there are several distracting factors.
<b>Sentence Structure (Sentence Fluency)</b>	All sentences are well-constructed with varied structure.	Most sentences are well-constructed with varied structure.	Most sentences are well-constructed but have similar structure.	Sentences lack structure and appear incomplete or rambling.
<b>Sequencing (Organization)</b>	Details are placed in logical order and the way they are presented effectively keeps the interest of the reader.	Details are placed in logical order but the way in which they are presented sometimes makes writing less interesting.	Some details are not in a logical or expected order, and this distracts the reader.	Many details are not in a logical or expected order. There is little sense that the writing is organized.
<b>Adding Personality (Voice)</b>	The writer seems to be writing from knowledge or experiences. The author has taken the ideas and made them their own.	The writer seems to be drawing on knowledge or experience, but there is some lack of ownership of the topic.	The writer relates some of his own knowledge or experience, but it adds nothing to the discussion of the topic.	The writer has not tried to transform the information in a personal way. The ideas and they way they are expressed seem to belong to someone else.
<b>Focus on Topic (Content)</b>	There is on clear, well-focused topic. Main idea stands out and is supported by detailed information.	Main idea is clear but the supporting information is general.	Main idea is somewhat clear but there is a need for more supporting information.	The main idea is not clear. There is a seemingly random collection of information.

## Graphing: Bar, Line, and Pie Graphs

To be used for all graphing projects in the unit. Omit sections that do not apply to certain graphs.

CATEGORY	4	3	2	1
Title	Title is clear and relates to the information in the graph. Printed on top of the graph.	Title is present, but does not relate to the the information in the graph. Printed at the top of the graph.	Title is prints in an obscure place that is difficult for the reader to find. Does not relate to information.	Title is not present.
Labeling of X axis	Writer appropriately labels the X axis with makes no errors in grammar so the product is easy to read.	Writer appropriately labels the X axis with makes mistakes in grammar so the product is not easily read.	Writer inappropriately labels the X axis, however there are no mistakes in grammar so it is easily read.	Writer inappropriately labels the X axis, and there are mistakes in grammar so it is not easily read.
Labeling of Y axis	Writer appropriately labels the Y axis with makes no errors in grammar so the product is easy to read.	Writer appropriately labels the Y axis with makes mistakes in grammar so the product is not easily read.	Writer inappropriately labels the Y axis, however there are no mistakes in grammar so it is easily read.	Writer inappropriately labels the Y axis, and there are mistakes in grammar so it is not easily read.
Data Table	Data table is well organized, accurate, and easy to read.	Data table struggles in one of the following areas; organization, accuracy, legibility.	Data table struggles in two of the following areas; organization, accuracy, legibility.	Data table struggles in all areas of organization, accuracy and legibility.
Units	All units are present in key with labels and are properly sized for the data.	Most units are present in key with labels and properly sized for the data.	All units are present in key with labels but are not properly sized for the data.	Key is not present nor are units appropriately sized for the data.
Accuracy of Plot	All points are plotted correctly and are easy to see and interpret.	Most points are plotted correctly and are easy to see and interpret.	Several points are difficult to read due to sloppiness.	Points are plotted incorrectly.
Pie Graph	Excel sheet table has accurate info in the correct columns. This produced an accurate pie graph.	Excel sheet has 1 error.	Excel sheet has 2 errors.	Excel sheet was not completed correctly and an accurate Pie Graph was not produced.
Interpreting Data	Student was able to use critical thinking to interpret the data and completely answer the questions with 100% accuracy.	Student was able to use critical thinking to interpret the data by answering the oral question with 90-99% accuracy	Student answered the question, however was not able to show understanding of the data.	Student struggled to answer the question and was not able to answer correctly or completely.

## Map Making

For use in evaluating *Salt Dough Map* Module.

CATEGORY	4	3	2	1
Title	Title tells the purpose/content of the map, is clearly distinguishable as the title (e.g. larger letters, underlined), and is printed at the top of the map.	Title tells the purpose/content of the map and is printed at the top of the map.	Title tells the purpose/content of the map, but is not located at the top of the map.	Purpose/content of the map is not clear from the title.
Map Legend/Key	Legend is easy-to-find and contains a set of symbols, including a compass rose.	Legend contains a complete set of symbols, including a compass rose.	Legend contains an almost complete set of symbols, including a compass rose.	Legend is absent or lacks several symbols.
Labels & Features - Neatness	90-100% of the labels and landmarks can be read easily.	89-80% of the labels and landmarks can be read easily.	79-70% of the labels and landmarks can be read easily.	Less than 70% of the labels and landmarks can be read easily.
Labels - Accuracy	At least 90% of the items are labeled & placed correctly.	80-89% of the items are labeled and located correctly.	79-70% of the items are labeled and located correctly.	Less than 70% are labeled & placed correctly.
Color Choices	Student always uses color appropriate for features (blue for water; black for labels, etc.) on map.	Student usually uses color appropriate for features (e.g. blue for water; black for labels, etc.).	Student sometimes uses color appropriate for features (e.g. blue for water; black for labels, etc.).	Student does not use color appropriately.
Neatness of Color and Lines	All straight lines are ruler-drawn, all errors have been neatly corrected and all features are colored completely.	All straight lines are ruler-drawn, most errors have been corrected and most features are colored completely.	Most straight lines are ruler-drawn, most errors have been corrected and most features are colored completely.	Many lines, corrections of errors, and/or features are not neatly done.
Spelling/Capitalization	95-100% of words are spelled and capitalized correctly.	94-85% of the words are spelled and capitalized correctly.	84-75% of the words are spelled and capitalized correctly.	Less than 75% of the words are spelled/capitalized correctly.
Knowledge Gained	When shown a blank base map, the student can rapidly and accurately label at least 10 features.	When shown a blank base map, the student can rapidly and accurately label 8-9 features.	When shown a blank base map, the student can rapidly and accurately label 6-7 features.	When shown a blank base map, the student can rapidly and accurately label fewer than 6 features.
Relative Location	Student can utilize directions vocab to describe where map features are with 100% accuracy.	Student can utilize directions vocab to describe where map features are with 90-99% accuracy.	Student can utilize directions vocab to describe where map features are with 75-89% accuracy.	Student can utilize directions vocab to describe where map features are with less than 75% accuracy.

Rubric 4

### Using Evidence

The purpose of this is to evaluate student knowledge of the topic.  
Can be utilized with Rubric 1 if writing is being brought to publication.

CATEGORY	4	3	2	1
<b>Position Statement</b>	The position statement provides a clear, strong statement of the author's position on the topic.	The position statement provides a clear statement of the author's position on the topic.	A position statement is present, but does not make the author's position clear.	There is no position statement.
<b>Support for Position</b>	Includes 3 or more pieces of evidence (facts, statistics, examples, real-life experiences) that support the position statement. The writer anticipates the reader's concerns, biases or arguments and has provided at least 1 counter argument.	Includes 3 or more pieces of evidence (facts, statistics, examples, real-life experiences) that support the position statement.	Includes 2 pieces of evidence (facts, statistics, examples, real-life experiences) that support the position statement.	Includes 1 or fewer pieces of evidence (facts, statistics, examples, real-life experiences).
<b>Accuracy</b>	All supportive facts and statistics are reported accurately.	Almost all supportive facts and statistics are reported accurately.	Most supportive facts and statistics are reported accurately.	Most supportive facts and statistics were inaccurately reported.

Created at rubistar.4teachers.org



Rubric 5

### Physical Activity: Interpersonal Behavior

Intended for use in *Make it to Nome* module.

CATEGORY	4	3	2	1
<b>Working with Others</b>	Almost always listens to, shares with, and supports the efforts of others. Tries to keep people working well together.	Usually listens to, shares, with, and supports the efforts of others. Does not cause turmoil in the group.	Often listens to, shares with, and supports the efforts of others, but sometimes is not a good team member.	Rarely listens to, shares with, and supports the efforts of others. Often is not a good team player.
<b>Problem-solving</b>	Actively looks for and suggests solutions to problems for themselves and other students.	Actively looks for and suggests solutions to problems for themselves OR other students.	Does not suggest or refine solutions, but is willing to try out solutions suggested by others.	Does not try to solve problems or help others solve problems.
<b>Focus on the task</b>	Consistently stays focused on the task and what needs to be done. Very self-directed.	Focuses on the task and what needs to be done most of the time. Other group members can count on this person.	Focuses on the task and what needs to be done some of the time. Other group members must sometimes nag, prod, and remind to keep this person on-task.	Rarely focuses on the task and what needs to be done. Lets others do the work.
<b>Pride</b>	Work reflects this student's best efforts.	Work reflects a strong effort from this student.	Work reflects some effort from this student.	Work reflects very little effort on the part of this student.
<b>Kindness</b>	Student is kind and helpful to their peers. There is no negative talk to self or others.	Student is kind and helpful to their peers, but occasionally engages in negativity toward own abilities.	Student is satisfied with themselves, but occasionally has a tendency to be unkind to peer's abilities.	Student engages in consistent negativity with themselves and/or their peers.

## Geometry in Patterning

For use in evaluating *Dog Blankets* module.

CATEGORY	4	3	2	1
<b>Shape Recognition</b>	Student recognizes different shapes fit together to create squares. Shows knowledge by using different sized squares and triangles to create quilt squares.	Student recognizes different shapes fit together to create squares. Shows knowledge by using same sized squares and triangles to create quilt squares.	Student recognizes different shapes fit together to create squares. Shows knowledge by using same sized squares OR triangles to create quilt squares.	Student does not recognize different shapes fit together to create squares. Shows lack knowledge by using random shapes that overlap to create quilt squares.
<b>Symmetry</b>	Student uses symmetry with their cuts to create the shapes for their pattern. Pattern is of the student's own creation.	Student uses symmetry with their cuts to create the shapes for their pattern. Pattern is not of the student's own creation.	Students used symmetry for some cuts, but did not utilize it throughout the entire project.	Students struggled with the use of symmetry to create even shapes.

Created at [rubistar.4teachers.org](http://rubistar.4teachers.org)